

Massachusetts Burn Injury Reporting System

2002 Annual Report

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FP-84F Form – Massachusetts Burn Injury Report Form

Executive Summary

In 2002, the eighteenth full year of the Massachusetts Burn Injury Reporting System (M-BIRS), 51 acute care hospitals and other health care facilities reported 368 victims of burns. M-BIRS was established in the Department of Public Safety in 1984 as a tool to help fire service and law enforcement personnel identify arsonists that may have been burned while setting fires. M-BIRS, along with the Office of the State Fire Marshal, was carried over to the newly created Department of Fire Services in 1996. It remains a joint program of the Department of Fire Services and the Massachusetts Department of Public Health. The “Burn Registry” also provides valuable data on the nature of the burn problem in the Commonwealth.

Statutory Authority for M-BIRS in MGL 112, Section 12A

According to Massachusetts General Law (MGL) Chapter 112, Section 12A, the treatment of all burn injuries extending over 5% or more of a person’s body surface area must be reported immediately to the State Fire Marshal.

M-BIRS Has Two Main Purposes — Identifying Arsonists and Burn Prevention

Data collected by the Massachusetts Burn Injury Reporting System is used in several ways. Investigators use the data to determine if an arsonist was treated for a burn that resulted from an attempt to illegally burn a building or vehicle. If these burns are not reported promptly, arsonists may continue to light fires that threaten life and property.

Our data has also been used to identify problems that need to be addressed by public education or regulation or development of appropriate intervention strategies. We need to know what type of activity injures whom, if the injuries are seasonal and how old the victims are to develop and implement effective prevention programs. We appreciate the efforts of the many dedicated doctors, nurses and clerical personnel who report the burn injuries promptly and completely. They make the program work.

Painful, disfiguring and expensive burn injuries exact a tremendous toll from their victims, their families and society. The statistics in this report illustrate the need for more burn prevention education and indicate to whom specific safety messages should be targeted.

State Fire Marshal Stephen D. Coan invites health and medical professionals, classroom and community educators, day care teachers and elder service workers to join with him in making the Commonwealth safer from burn injuries.

Program to Reduce Scalds to Restaurant Kitchen Workers

In an effort to protect workers, often teenagers, who are burned working in restaurant kitchens, the Department of Fire Services and the Mass. Department of Public Health have collaborated with the Mass. Restaurant Association to develop a poster on first aid for burns in restaurants. The Massachusetts Restaurant Association will ask members to put these posters in their kitchens.

Scalds Caused 40% of Reported Burn Injuries

Scalds have been the leading cause of burn injuries for the past 18 years. In 2002, scalds caused 148 or 41% of the burn injuries reported to M-BIRS. Spilled hot beverages caused the majority of scald burns. Hot tap water, cooking liquids and grease, and car radiators also caused scald burns.

Keep Hot Liquids Away from Babies and Preschoolers

In 2002, scalds were the leading cause of burn injuries in almost every age group, however young children were the most frequent victims of scald burns. Nearly half of the 148 scald victims were under five years old, and most were less than one year old. Children under five years of age were eight times more likely to be scalded. Hot beverages posed the greatest risk to young children; parents and caregivers of young children must remember that is dangerous to drink coffee while holding a baby.

Set Hot Water Heaters at 125° F or Lower

Hot tap water is also a danger to very young children. It takes only one second of exposure to water at 155°F to cause a third degree burn. Hot water heaters should be set to temperatures of 125° F or lower. Massachusetts state law states that the temperature must be set between 110°F and 130°F. Parents should never leave a baby or toddler alone in a bath. Young children like to turn knobs and use levers. They may turn on the hot water when a parent is distracted.

Kitchen is a Dangerous Place

A significant number of the burn injuries occur in the kitchen each year. Flame burns such as sleeves igniting while cooking, scald burns from grease splatters and hot liquids while cooking, many hot coffee and tea spills, contact burns from touching hot stoves, take place in the kitchen. Since we must cook every day, we must learn to do so safely. Children should also be kept in a safe area such as a high chair or playpen while cooking is taking place.

Clothing Ignitions Involved in Over One-Quarter of Flame Burns

Flame burns were the second highest cause of burn injuries in 2002 accounting for 20% of the burn injuries in 2002. A flame burn is when the fire is confined to the victim or the victim's clothing. Clothing ignitions were involved in 12, or 17%, of the flame burn injuries in 2002.

Seniors at Risk

Clothing ignitions were a significant factor in the burn injuries to older adults (people over 65) and caused one-fifth of the burn injuries to this age group.

Some age groups are at more risk than others for particular types of burn injuries because the activities they engage in are often age-related. For a more detailed look at causes of burn injuries by age group, please look at the section that begins on page 30.

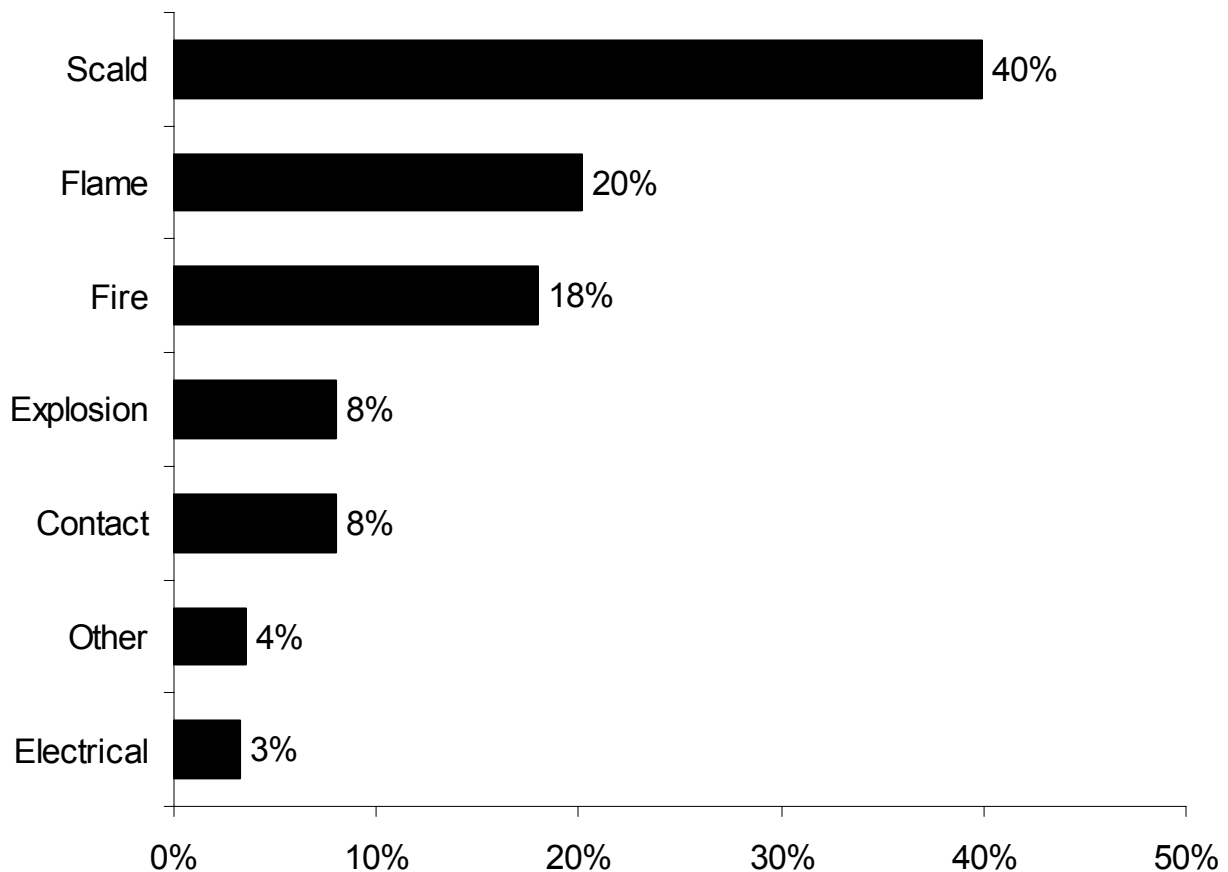
11% of Burns Work-Related

Hospitals reported that 11% of the burn victims were burned while working, down from the 14% reported in 2001, and the same as the 11% in 2000. Over four-fifths, 84%, of the people burned while working were male.

Causes of Burn Injuries

In this report, we look at burn injuries in two different ways. In the first section, we look at the type of incident that caused the burn. Was the burn caused by a fire, a flame, a scald or something else? A burn is said to result from a flame when the fire is confined to the victim or the victim's clothing. When a wider area burns, the injury is considered to result from fire.

Categories of Burn Injuries



We also look at more specific causes such as hot beverage scalds or incidents involving gasoline.

Type of Incidents Causing Burn Injuries

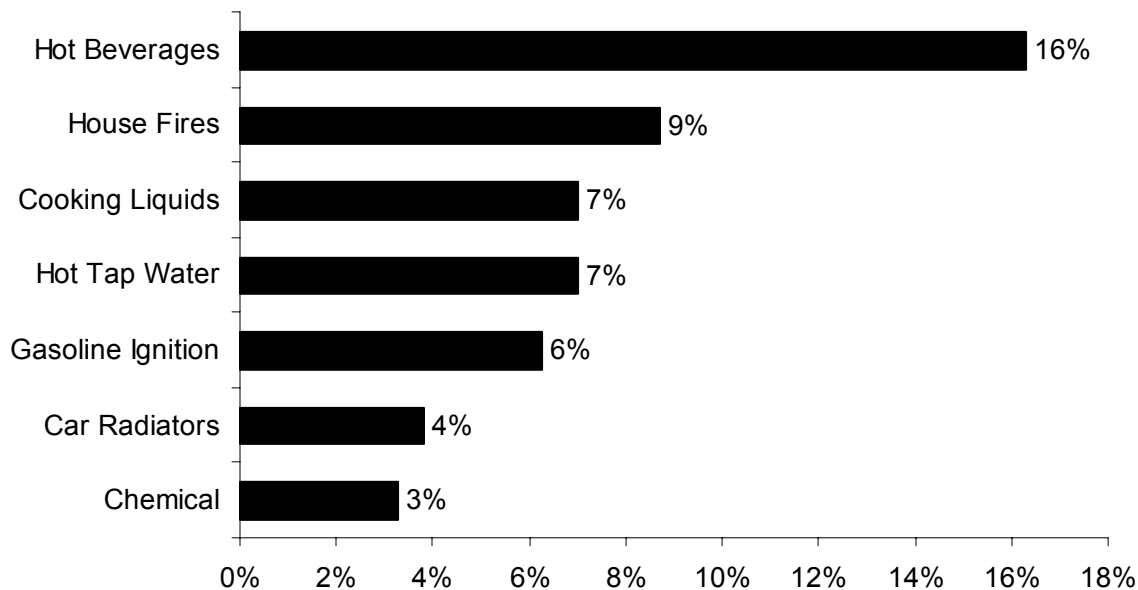
Nearly Half of All Burn Victims Never Come Near a Flame

Scalds from hot liquids, cooking grease and steam caused 40% of the 368 burn injuries reported in 2002. Flames from burning clothing, bedding or similar objects caused 20% of the burns. Eighteen percent (18%) were caused by fires; 8% were caused by explosions; and another 8% were caused by contact with hot objects. Electrical incidents such as electrocutions, flashburns¹ and explosions caused 3% of the burns. Four percent (4%) of the reported burns in 2002 had other causes, such as chemical burns or sunburns.

Look at Specific Causes and Equipment to Develop Prevention Strategies

To develop effective burn prevention policies and programs, we must first look at the specific items or behaviors that caused the burns. Sixteen percent (16%) of the 368 burn injuries reported in 2002 were scalds from hot beverages. House fires caused 9% of the total burns in 2002. Seven percent (7%) of the burns were caused by cooking liquids. Hot tap water caused another 7% of the burn injuries. Gasoline ignitions caused 6% of the reported burn injuries. Scalds from car radiators caused 4% of the burn injuries in 2002. Chemical burns accounted for 3% of the burns reported in 2002. For more information, please refer to the table *Specific Causes of Burn Injuries* in the Appendix.

Leading Causes of Burn Injuries



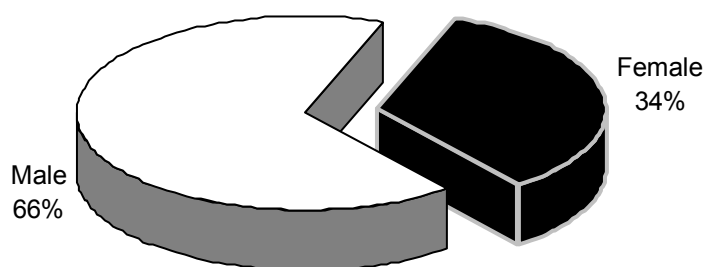
¹ A flashburn is a burn caused by short-term exposure to super-heated air generally from an explosion; there is no direct contact with flame.

Burn Injuries Caused by Scalds

Scalds Caused 40% of All Burns

Scalds have been the leading cause of burn injuries every year since the inception of M-BIRS. One hundred forty-eight (148), or 40%, of the 368 reported burns were hot scalds. Eleven (11), or 7%, of the 143 scalds occurred while the victim was working. Ninety-eight (98), or 66%, of the 148 scald victims were male and 50, or 34% were female.

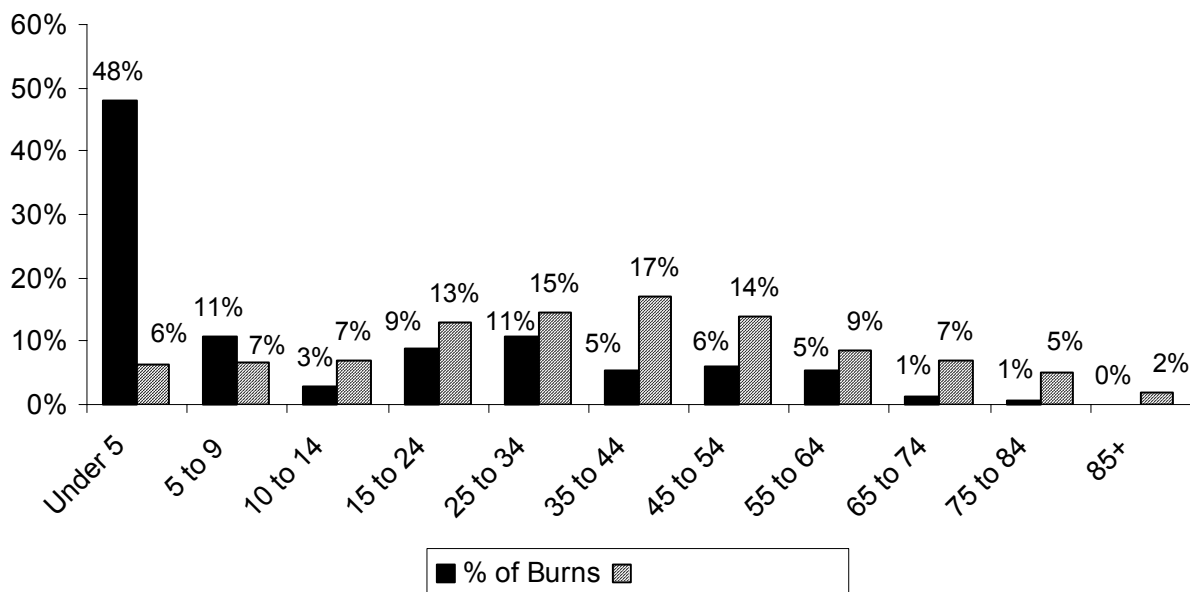
Scald Burns by Gender



Children Under 5 Years Old Were Most at Risk for Scald Burns

Young children were the most frequent victims of scald burns. According to the 2000 U.S.

Scalds by Age Group



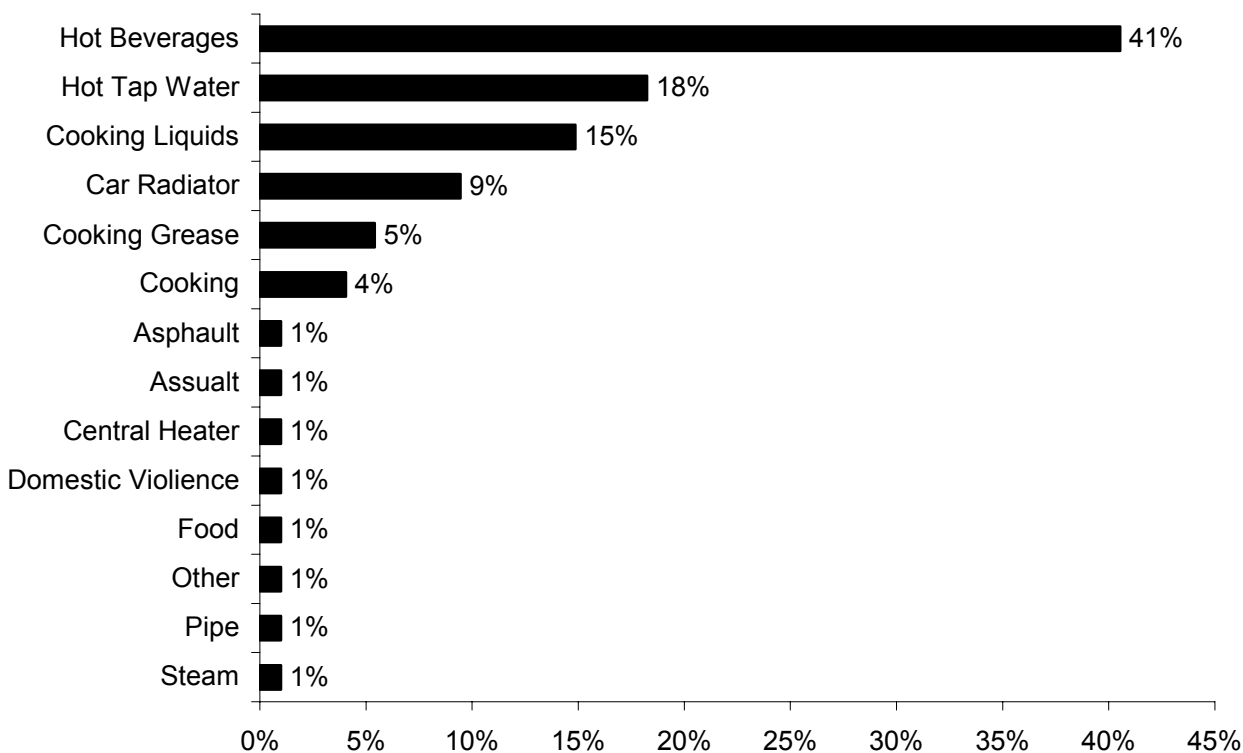
Census, children under the age of five years comprised 6% of the Massachusetts population. However that same age group accounted for almost half, some 48%, of all scald burns in 2002. Forty-four, or 30%, were infants one year old or younger. Children aged five to nine accounted for 11%, while children aged ten to fourteen accounted for 3% of these injuries.

Many adults also suffered burns from scalds. Nine percent (9%), were between 15 and 24 years old; 11% were between 25 and 34; 5% were between 35 and 44 years of age; 6% were between 45 and 54; 5% were between 55 and 64; 1% were between 65 and 74; 1% were between 75 and 84. There were no scald burn injuries to anyone over 85 years old. Three one-month old infants (two girls and one boy) were the youngest scald burn victims, while the oldest person to have one of these burns was a 79-year old man. When the shaded bar of the graph representing the percent of scald burns is higher than the striped bar representing percent of population, higher than expected risk at this type of injury exists. Only pre-schoolers and young adolescents were scalded at a disproportionate rate.

Hot Beverages Caused 41% of All Scald Burns

Spilled hot beverages caused more scalds and more burn injuries than any other cause. This restores the trend of the past ten years that was only interrupted in 1999 when hot cooking liquids was the leading cause by one percentage point over hot beverages. Forty-one percent (41%), of the 148 scald burns were caused by hot beverages. Eighteen percent (18%) were caused by hot tap water. Cooking liquids was third, accounting for 15% of all scald burns. The

Causes of Scalds



improper opening of hot car radiators was the cause for some 9% of these injuries. This is more than double the number of scald burns caused by the improper opening of car radiators from the past year, going against a downward trend since 1998. Five percent (5%) were caused by cooking grease. Four percent (4%) were caused by other cooking activities. Asphalt, an assault, a central heater, domestic violence, food, a pipe, steam and contact with an unspecified substance were each the source in 1% of the reported scald burn injuries in 2002.

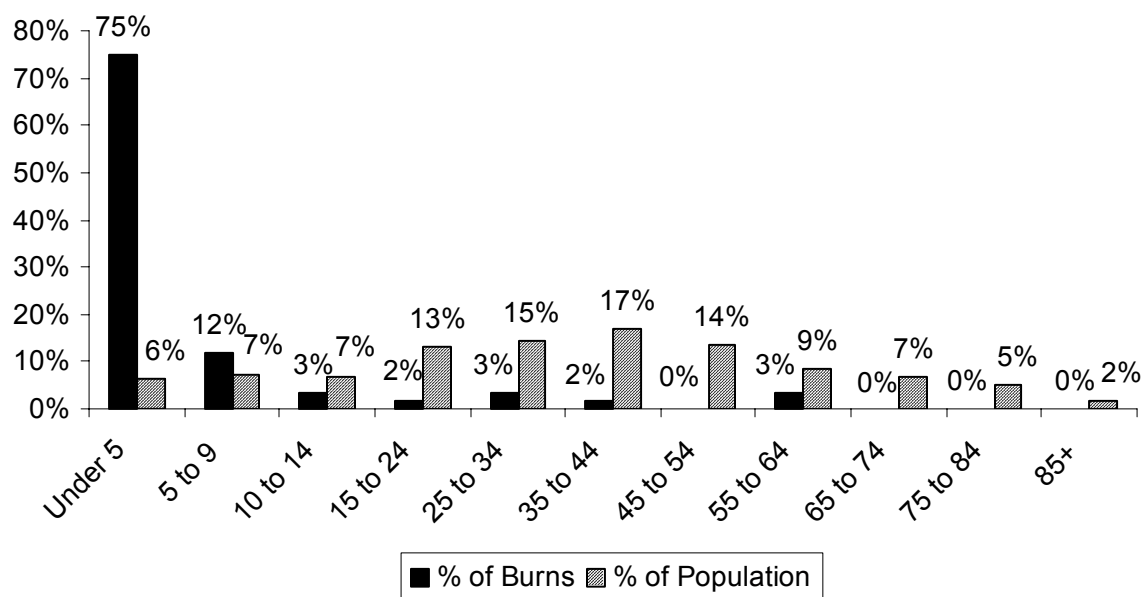
Hot Beverages

Hot Beverages Caused 41% of All Scalds

Sixty (60), or 41%, of the 148 scald burns were caused by hot beverages. These 60 burns accounted for 16% of the 368 burn injuries reported in 2002. Except for 1999, hot beverages have been the leading cause of scald burns since the inception of M-BIRS in 1984.

Fifty-seven percent (57%) of the 60 hot beverage scald victims were male and 43% were female. Hot beverages scalded three people, one woman and two men, while they were working.

Hot Beverage Scalds by Age Group



3/4 of the Hot Beverage Scald Victims Were Under 5

Seventy-five percent (75%) of the 60 hot beverage scald victims of known age were less than five years of age. Children under five years old were 12.5 times more likely to be scalded by a hot beverage. Twenty-seven (27), or 45%, of the victims who were scalded were one-year old or younger. In the previous year, 73% of the victims of hot beverage scalds were less than five years old.

Twelve percent (12%) of the hot beverage scald victims were between five and nine years old; 3% were between 10 and 14 years old; 2% were between 15 and 24; 3% were between 25 and 34; 2% were between 35 and 44; there were no reported scalds for the age group between 45 and 54; 3% were between 55 and 64; no one over the age of 62 was reported to have received a scald burn from a hot beverage. Two one month old infants (one girl and one boy) were the youngest hot burn scald burn victims, while the oldest person to have one of these burns was a 62-year old woman.

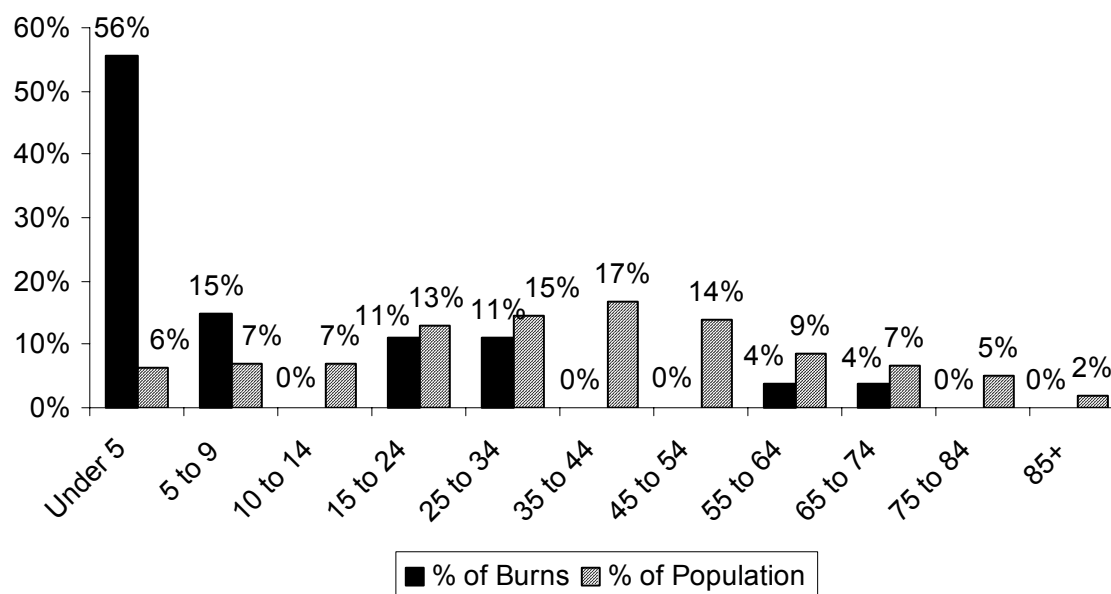
Hot Tap Water

Hot Tap Water Caused Almost 1/5 of All Scalds

Excessively hot tap water caused 27, or 18%, of the 148 scald burns and 7% of the 368 total burn injuries reported to M-BIRS in 2002. Hot water heaters should be set to temperatures of 125° Fahrenheit or less. Massachusetts law states that the temperature must be set between 110° and 130° F and most dishwashers have coils to boost their internal water temperature.

Fifty-nine percent (59%) of victims were male while the other 41% were female. This is a reversal from last year when 56% of the victims were female and 44% were male. Only one of the 26 victims, a 26-year old woman, was scalded during work-related activities.

Hot Tap Water Scalds by Age Group



Over 1/2 of Tap Water Scald Victims Were Under the Age of 5

Fifty-six percent (56%) of the 27 hot tap water scald victims of known age were less than five years old. Some were very young infants placed in water that was too hot for their sensitive skin.

Other children were interested in exploring their environment and turned on faucets. Adults may prepare a safe bath, but a child may turn on the hot water if left alone for a moment or two.

At 155° F it takes only one second to sustain a third degree burn. At 130° F it takes thirty seconds. At 120° F it can take a full five minutes to sustain a third degree burn.²

Massachusetts state law requires that the temperature for hot water heaters should be set between 110° and 130° F. It is important for homeowners to make sure their own water heaters are set in the appropriate range.

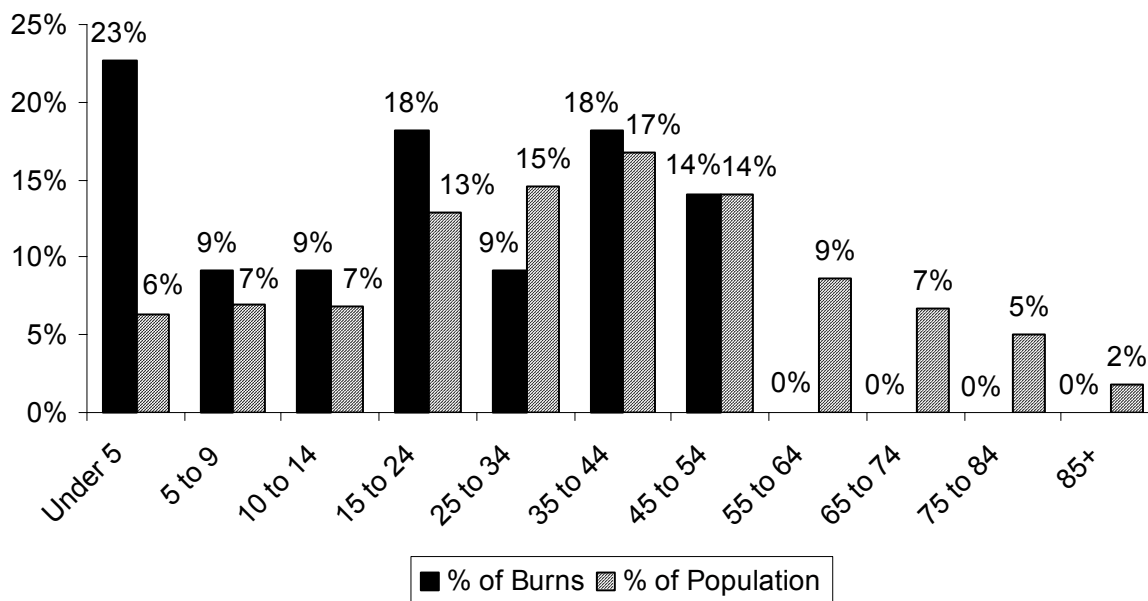
Fifteen percent (15%) of the tap water victims were between the ages of five and nine; there were no hot water tap scalds for the age group between 10 and 14 years old; 11% were between 15 and 24 years of age; another 11% were between 25 and 34; there were no other tap water scald burns in the age groups between 35 and 44 and 45 and 54 years old; 4% were between 55 and 64; another 4% were between 65 and 74; no one over the age of 72 received a scald burn from hot tap water. The youngest hot tap water scald burn victim was a one-month old girl, while the oldest person to have one of these burns was a 72-year old man.

Hot Cooking Liquids

Hot Cooking Liquids Caused 15% of Scalds, 6% of All Burns

Hot cooking liquids caused 22, or 15%, of the 148 scald burns and 6% of the 368 burn injuries

Hot Cooking Liquid Scalds by Age Group



reported in 2002. Sixty-four percent (64%) of the victims were male and 36% were female. This is another reversal from 2001 when one half of the victims were male and the other half were female. Hot cooking liquids scalded three people, all adult men, while they were at work.

Almost 1/4 of Cooking Liquid Scald Victims Were Under the Age of 5

The people most at risk for this type of burn are generally just beginning to cook for themselves. However, 23% of the cooking liquid scald victims were under five years old. They were four times more likely to be victims of a hot cooking liquid scald. Nine percent (9%) were between 5 and 9 years of age; another 9% of these injuries occurred within the age group between 10 and 14; members of the age group between 15 and 24 were in the second highest group of scalds caused by hot cooking liquids accounting for 18%; 9% were between 25 and 34; another 18% were between 35 and 44; 14% were between 45 and 54; no one over the age of 46 received a scald burn injury from hot cooking liquids. The youngest hot cooking liquid scald burn victim was a three-month old boy, while the oldest person to have one of these burns was a 46-year old man.

Hot Car Radiators

The improper opening of hot car radiators caused 9% of the 148 scald burns and just 4% of the 368 burn injuries reported in 2002. This is more than double last year's total of six. Over the past fifteen years, there has been a definite declining trend of scald burns from the improper opening of hot car radiators with a peak total of fifty-one occurring in 1987 to the lowest count of five in 2001. However this trend could be changing, as there have been increases over the past two years.

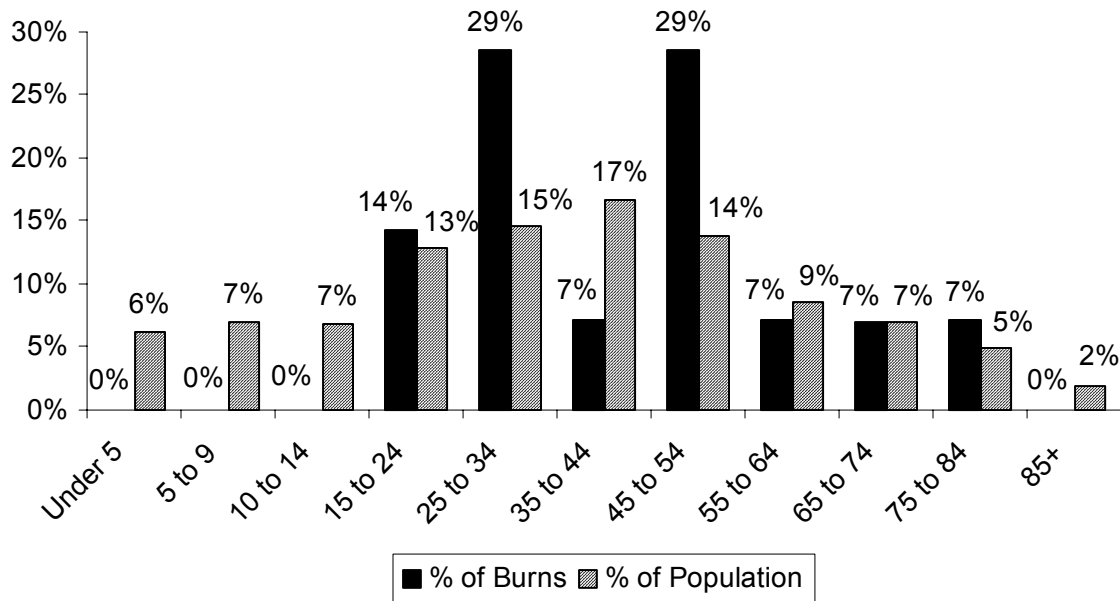
The Improper Opening of Hot Car Radiators Injured Teens & Adults Only

Of the 14 reported scald victims from car radiators in 2002, all 14 were male. Two victims, or 14%, were in the age group between 15 and 24; four victims, or 29%, were between 25 and 34; one victim, or 7%, was between 35 and 44 years old; another four victims, or 29%, were in the group 45 to 54 years of age. The age groups, 55 to 64, 65 to 74 and 75 to 84 each had a single victim accounting for 7% of the car radiator scald burn injuries in 2002. There were no reported car radiator scald burn injuries to anyone over the age of 79. The youngest car radiator scald burn victim was an 18-year old man, while the oldest person to have one of these burns was a 79-year old man.

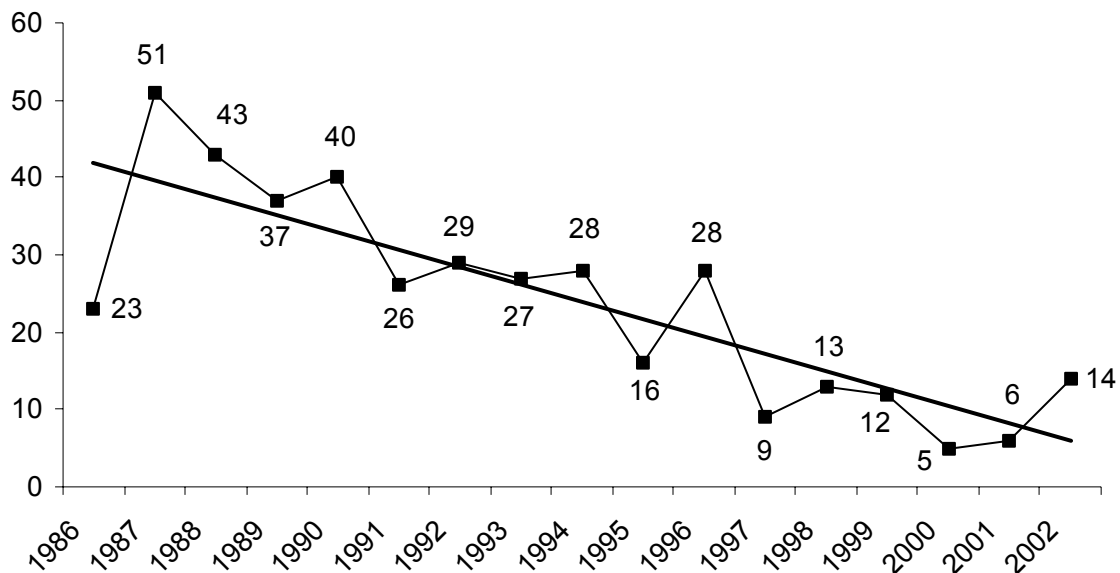
Ten of the 14 of these types of burns occurred between the months of June and September. One of the other four car radiator scald burns occurred in February, two occurred in April and the last one occurred in October.

² Source: Knapp Burn Foundation

Car Radiator Scalds by Age Group



Number of Car Radiator Scalds by Year



Safety Measures

- ✓ When your car overheats, keep in mind that the contents of the radiator are under tremendous pressure. If you open it, the boiling liquid and steam can erupt and cause severe burns to your

hands, arms and face. Wait at least a half hour for the car to cool down, and then use a rag to open slowly, releasing the pressure as slowly as possible.

Cooking Grease

Cooking Grease Caused 5% of All Scalds, 2% of All Burns

Hot cooking grease caused eight, or 5%, of the 148 scald burns and 2% of the 368 total burn injuries reported in 2002. Seventy-five percent (75%) of the eight cooking grease scald victims were male and 25% were female. There were no work-related cooking grease scalds in 2002.

Cooking Grease Scalded Adults Most Often

Three, or 38%, of the scald burn injuries from cooking grease were under five years old. No one between the ages of five and 24 received a scald burn from cooking grease in 2002. One victim, or 13% of these injuries, was between the ages of 25 and 34; another victim, or 13%, were between the ages of 35 and 44; there were no reported cooking grease scald burn injuries in the age group 45 to 54 in 2002; the other three victims, or 38%, were between the ages of 55 and 64. There were no reported cooking grease scald burn injuries to anyone over the age of 57. The youngest cooking grease scald burn victim was a one-year old girl, while the oldest person to have one of these burns were two 57-year old men.

This type of burn injury occurs predominantly to adults. Scalds from cooking grease combined with 15 cooking related flame burns makes the kitchen the place where burn injuries are most likely to take place. Since we must cook every day, we must learn to do so safely.

Safety Measures

- ✓ Turn pot handles inward so children cannot pull them down.
- ✓ Never leave hot liquids or food unattended or at the edge of a table or counter to be pulled down by a toddler or a young child.
- ✓ Use mitts when carrying containers of hot liquid or food.

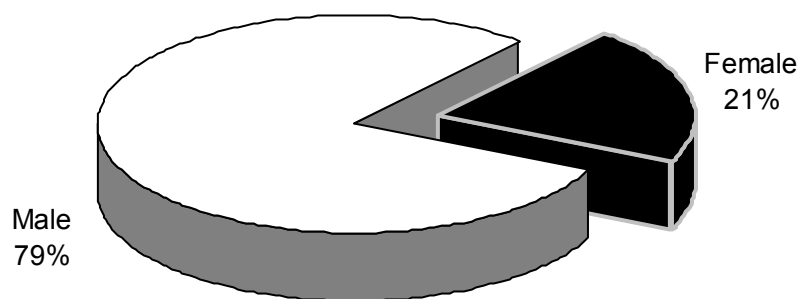
Flame Burn Injuries

Flames Caused 20% of Reported Burn Injuries

Seventy-two (72), or 20%, of the 368 burn injuries reported in 2002 were considered flame burn injuries. A burn is said to result from flame when the fire is confined to the victim or the victim's clothing. When a wider area burns, the cause of the injury is considered a fire. Burns caused by self-immolation, smoking in bed or burning clothing usually result from flames.

Seventy-nine percent (79%) of the flame burn casualties were male and 21% were female. Four, or 6% of the 72 flame burns, occurred during work-related activities; and all four were male.

Flame Burns by Gender

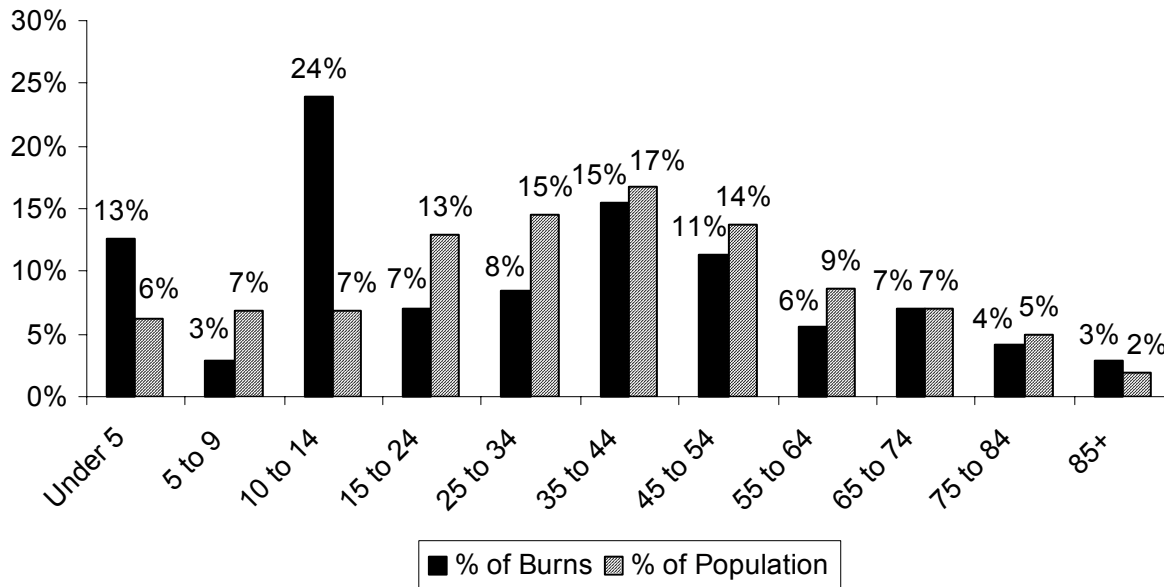


Children 10-14 Faced Disproportionate Risk of Flame Burns

Thirteen percent (13%) of the 72 flame burn victims were children under the age of five; 3% were between the ages of five and nine; 24% were between 10 and 14; 7% were victims with ages 15 to 24; 8% were between 25 and 34; 15% were between 35 and 44; 11% were between 45 and 54; 6% were between 55 and 64; 7% were between 65 and 74; 4% were between 75 and 84; and 3% of the victims were over the age of 85.

Two groups were at a higher risk for burns from flames. Children between the ages of 10 and 14 were three times as likely to be burned by flames, and children under five, were twice as likely to be burned

Flame Burn Injuries by Age Group



Cooking Involved In 1/4 of All Flame Burns

Cooking was involved in 15, or 20%, of all flame burns in 2002. Five, or 7%, of the flame burns involved clothing ignitions while cooking. Four (4), or 1%, of the victims were burned while barbequing. Three (3), or 1% of the victims, received their injuries by coming into contact with a hot stove. Two (2), or less than 1% of the victims, received their flame burn injuries from ignitions of hot cooking grease.

All five of the burn victims whose clothing ignited while cooking were male. Three-fifths of these victims were 55 years old or older. Cooking (other than clothing ignitions) accounted for 14% of the flame burn injuries in 2002.

Smoking accounted for 12, or 16%, of all flame burn injuries in 2002. Three (3) of these injuries, accounting for 4% of the total injuries in this category, were due to smoking while oxygen was in use. Two (2) flame burns, or 3%, were from cigarettes. Another two (2), or 3%, of the burns were from clothing ignitions while smoking. The two victims of these clothing ignitions were a 74-year old woman and a 75-year old man. Two children received their flame burn injuries while playing with matches. One victim received a burn from smoking while in bed accounting for 1% of the burns. One child (1%) received a flame burn injury from playing with a cigarette lighter, also accounting for 1% of flame burn injuries in 2002. Another victim received a flame burn injury from an unspecified smoking action.

Gasoline flame burns were the third leading cause of flame burn injuries in 2002. Gasoline caused 10, or 14%, of the flame burns. Four (4), or 40%, of these 10 gasoline flame burn injuries were to children.

Candles accounted for five, or 7% of flame burn injuries. Four of the five were the results of clothing ignitions from coming into contact with candles. Self-immolation was the cause of another five, or 7%, of 2002 flame burn injuries.

Propane and the contents of an aerosol can each contributed to three, or 4%, of the flame burn injuries in 2002. Two portable heaters and two men using a cutting torch while at work, each accounted for two, or 3%, of all flame burn injuries.

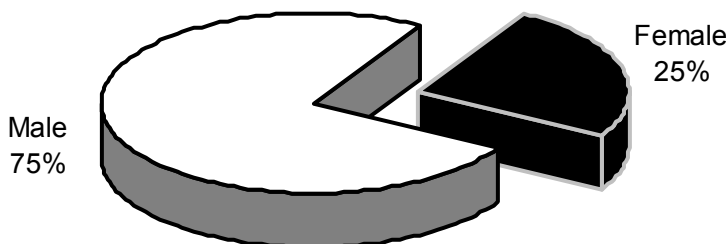
Spilt alcohol, a person trying to start a brushfire, a chemical, fireworks, clothing, a flashburn, a heater, huffing, ignitable liquids, a kerosene heater, a lamp, a machine, a hot tool, a woodstove and an unknown factor each accounted for one, or 1%, of the flame burn injuries.

Clothing Ignitions Account for Almost 1/5 of Flame Burn Injuries

Twelve, or 16%, of the flame burns injuries in 2002 involved clothing ignitions. Clothing ignitions while cooking were the cause of five, or 7%, of these injuries. Four victims, or 5% of the flame burn injuries, received their burns when a candle ignited their clothes. Clothing ignitions from smoking were responsible for 2, or 3%, of the burns. An 11-year old child had his clothes ignite.

Nine (9) of the victims were male and three were female.

Clothing Ignitions by Gender



Almost Half of All Flame Burn Injury Victims Due to Clothing Ignitions Were Over 65

Five (5), or 42% of all the victims of flame burn injuries due to clothing ignitions were over 65-years old. Two (2) children under the age of five incurred this type of flame burn injury accounting for 17% of flame burn injuries caused by clothing ignitions. Children between the ages of five and nine accounted for one, or 8%, of these injuries. Two (2), or 17% of these victims were in the age group 10 to 14 years old. Another two victims, or 17%, of flame burn injuries due to clothing ignitions were between 45 and 54 years old. The youngest person to receive a flame burn injury from a clothing ignition was a one-year old boy whose clothes were

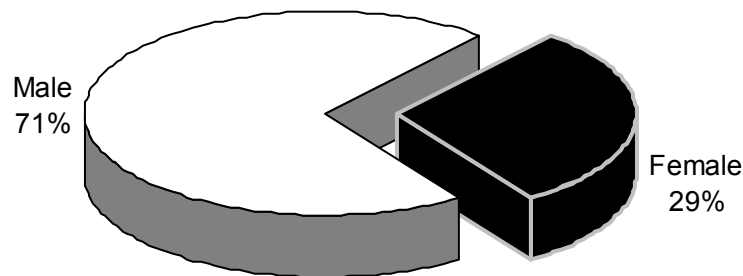
ignited by a candle; and the oldest victim from a clothing ignition flame burn injury was an 90-year old man who received his injuries while cooking. No one between the ages of 15 and 44 and between 55 and 64 years of age received a flame burn due to clothing ignition.

Burn Injuries Caused by Fires

Fires Caused 18% of Burn Injuries

Sixty-eight (68), or 18% of the 368 burn injuries reported in 2002 were caused by fires. Seventy-one percent (71%) of the 68 victims were male and 29% were female. Analysis of data from the Massachusetts Fire Incident Reporting System found that the majority of fire injuries occurred while the victim was attempting to control the fire and that men are more likely than women to attempt to control the fire and become injured.

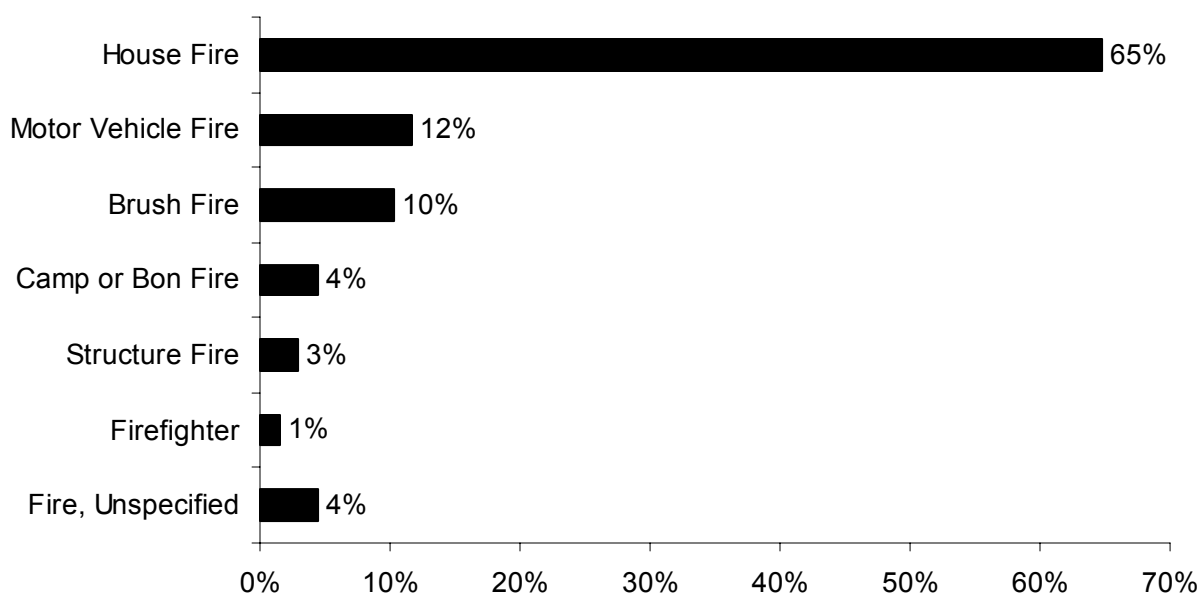
Fire Burn Victims by Gender



65% of Fire Burn Injuries Occurred in People's Homes

Residential fires caused 44, or 65%, of the 68 fire burn injuries reported in 2002. Eight (8), or 12%, of the injuries occurred in motor vehicle fires; seven, or 10%, were caused by brush fires; three, or 4%, were due to camp or bon fires; two, or 3%, of the victims received their burns in non-residential structure fires; and three, or 4%, of fire burn injuries occurred in unclassified fires, all three of which involved gasoline. One of the victims was a child playing with the gasoline.

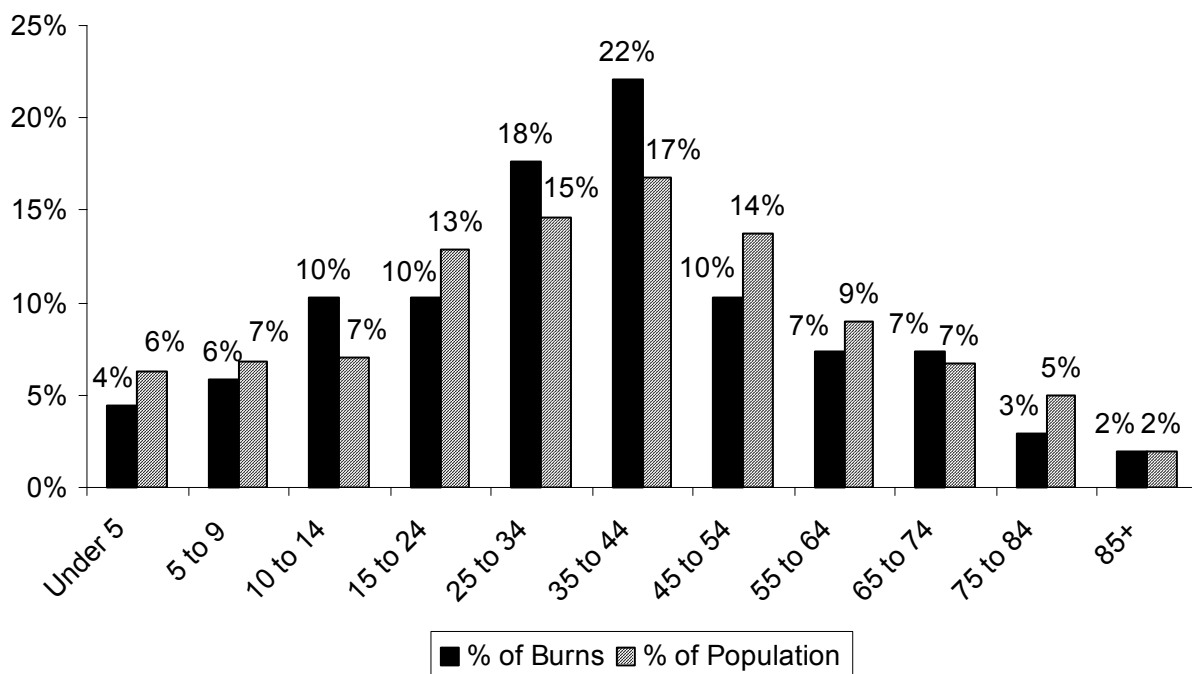
Types of Fires Causing Burns



Adults Ages 25 to 44 Are the Most Apt to Incur Fire Burn Injuries

Three, or 4%, of the victims burned in fire incidents were under five years old; four, or 6%, were between five and nine years of age; seven, or 10%, were between 10 and 14; another seven, or

Fire Burn Injuries by Age Group



10%, were between 15 and 24; 12, or 18%, were between 25 and 34; 14, or 22%, were between 35 and 44; seven, or another 10%, were between the ages of 45 and 54; five, or 7%, were aged between 55 and 64; four, or 7%, were aged between 65 and 74; two, or 3%, were between 75 and 84; and the remaining victim, or 2%, of fire burn injuries were over the age of 85.

Reported Burns Are a Fraction of Injuries From Fires

Only burn injuries that extend to 5% or more of the body surface area and are treated by a medical professional are reported to the *Massachusetts Burn Injury Reporting System*. Consequently, the human cost of fires is under-reported in this analysis. Smoke inhalation, cuts, fractures and less severe burns incurred while fighting or fleeing the fire are not recorded here. Fire deaths are not recorded. Properly maintained smoke detectors and quick-response residential sprinklers could prevent many of the injuries caused by fires. Detectors should sound an early warning to leave the area and quick-response sprinklers can control or possibly extinguish a fire in its earliest stages.

Refer to MFIRS Annual Report for More Information about Fires

For more information about the causes of fires and fire-related casualties, please refer to the *Massachusetts Fire Incident Reporting System – Annual Reports*. Using data collected by the Massachusetts Fire Incident Reporting System (MFIRS), it examines the causes of fires, fire deaths and fire injuries. Information is provided on fires in different occupancies and on special topics such as children and fire, fires caused by smoking, electrical fires, cooking fires and heating equipment fires.

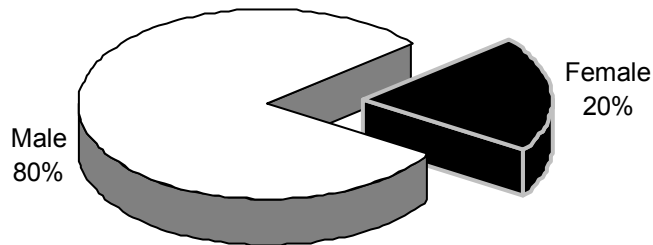
Burn Injuries Caused by Explosions

Explosions Caused 8% of Reported Burn Injuries

Thirty (30), or 8%, of the 368 burn injuries reported in 2002 were caused by explosions. Eighty percent (80%) of the explosion burn victims were male and 20% were female.

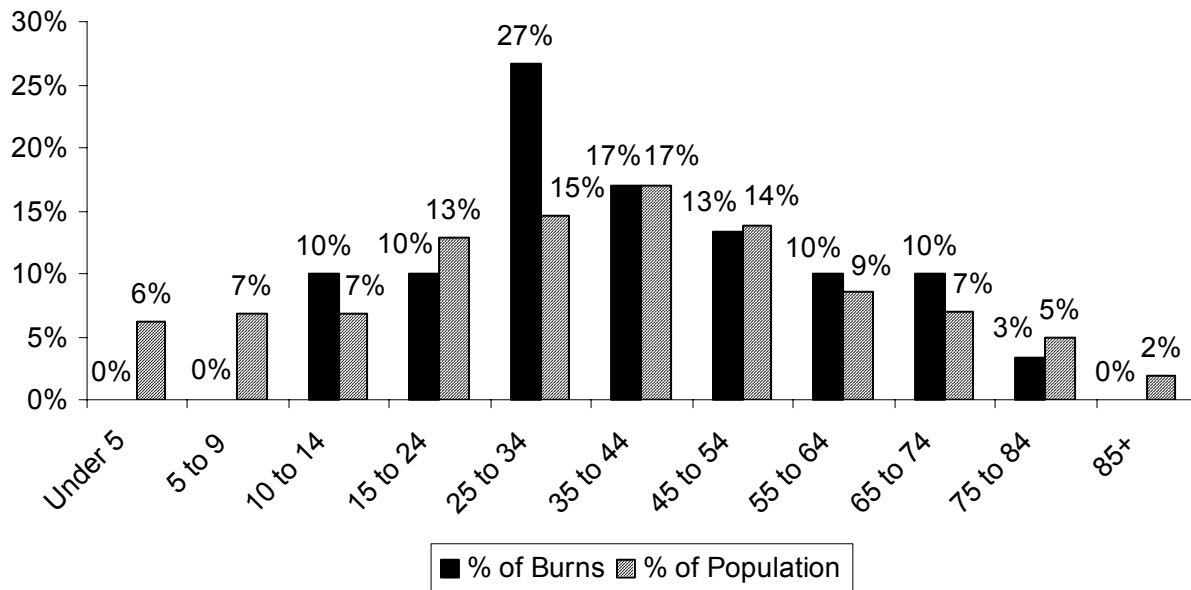
Twelve (12) burns, or 40%, occurred during work-related activities. All of these victims were male. This is a continuation of the trend where 14, or 38% of explosions, were work-related in 2001, in 1999 nine, or 41%, were work-related, and in 1998 seven, or 26% of the burn injuries caused by explosions, were work-related. In 2000 only two burns, or 7%, of the burns caused by explosions were work-related.

Explosion Burn Injuries by Gender



Out of these 30 injuries only two were the result of the same explosion. A 59-year old woman was visiting her 55-year old male friend at his Athol home where the propane tank had an undiscovered leak. When the owner went to light his cigarette, he ignited the propane fumes which caused an explosion and a resulting fire. The female victim received second degree burns to 20% of her body. The male homeowner received second degree burns over 30% of his body surface area.

Explosion Burn Injuries by Age Group



Adults Ages 25 to 34 Face Greatest Risk of Explosion Burns

There were no victims who received burns as the result of explosions under nine years old; children between the ages of 10 to 14 accounted for three, or 10%, of these injuries; another three, or 10%, were between the ages of 15 to 24; the largest group, adults between the ages of 25 and 34 received 8, or 27%, of the explosion related burns; five, or 17%, were between 35 and 44; four, or 14%, were between 45 and 54 years of age; three, or 10%, were between 55 and 64 years old; and another three, or 10%, were between 65 to 74 years old. There was one victim between 75 and 84 years old, accounting for 3% of the explosion burns. No one over the age of 76 received a burn injury due to an explosion.

There Were 4 Reported Fireworks Explosion Burn Injuries

Propane was the leading cause of explosion injuries and caused five, or 17%, of them. In 2002, fireworks accounted for four, or 13%, of all explosion related burns. In the previous year, there were no reported burn injuries due to fireworks. Gasoline accounted for three explosion burn injuries, or 10%, and was the third leading cause. Explosives, flammables, natural gas and cutting torches each accounted for two, or 8%; An aerosol can, a boiler, an unidentified chemical, cooking liquids, a flammable material, a gas stove, an ignitable liquid, a cigarette lighter, a machine and a case of self-immolation each accounted for one, or 3%, of the explosion-related burn injuries.

13-Year Old Boy Gets Burns From Fireworks

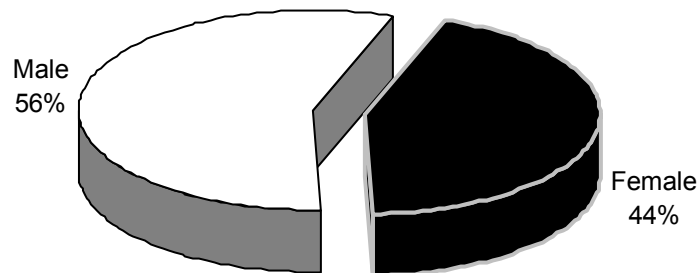
On July 5, 2002 a 13-year old boy from Lynn was camping in Maine. The fireworks he was carrying in his pocket exploded when he was standing too close to a camp fire. The victim received first degree burns to his thigh.

Contact Burn Injuries

Contact with Hot Objects Caused 7% of Reported Burn Injuries

Twenty-five (25), or 8%, of the 368 burn injuries reported in 2002 were caused by contact with hot objects. Fifty-six percent (56%) of the burn victims were male and 44% were female. Four, or 15%, of contact burns occurred at work in 2002.

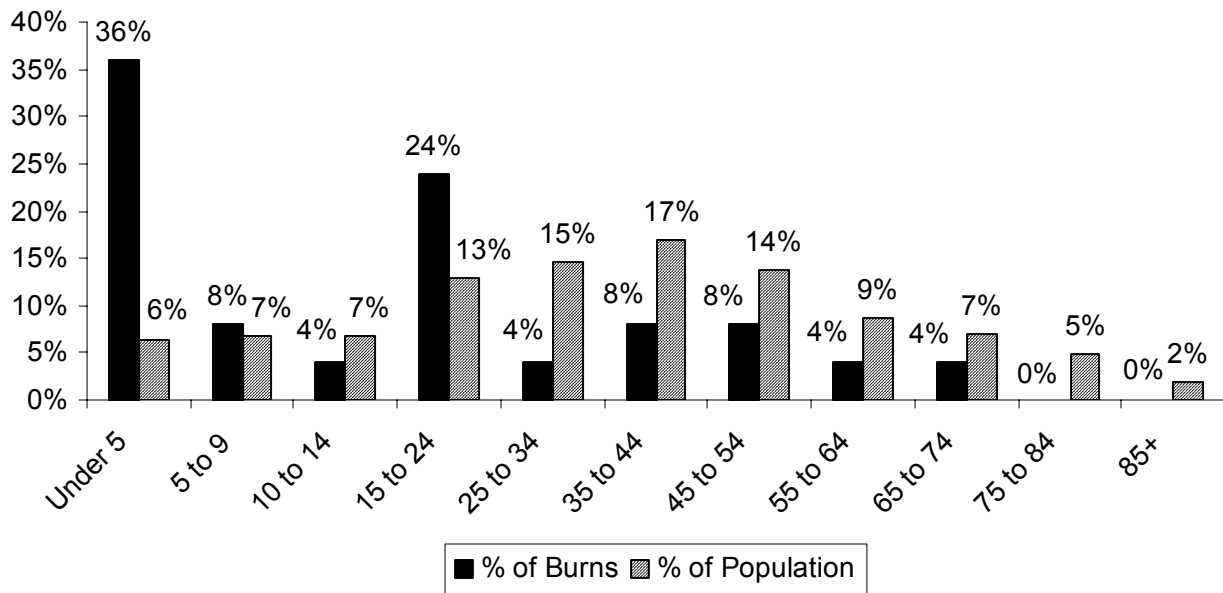
Contact Burn Injuries by Gender



35% of Contact Burns Were to Children Under 5

Over one-third of all the 26 contact burns reported in 2002 were to children under the age of five. This age group accounted for nine, or 35%, of all contact burns. Pre-schoolers faced six times the risk of contact burns. This disproportionate risk could be the result of young children exploring their environment and underscores the need for constant supervision of toddlers. Two, or 8%, of these burn victims were between the ages of 5 and 9; one adolescent in the age group between 10 and 14 received a contact burn injury accounting for 4%; six, or 23%, were between 15 and 24; 4%, or one victim, were between 25 and 34; the age group 35 to 44 accounted for two victims, or 8%; another two, or 8% were aged 45 to 54, there was one contact burn victim in each of the age groupings 55 to 64, 65 to 74, each accounted for only 4% of the burn injuries from contact with hot objects. In 2002, no one over the age of 74 received a burn from contact with a hot object.

Contact Burn Injuries by Age Group



Hot Clothes Irons are the Leading Causes of Contact Burns

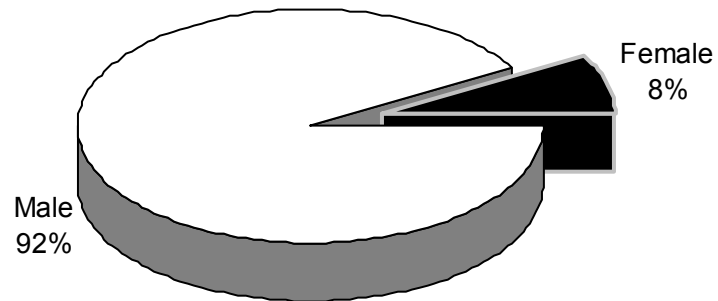
Hot clothes irons caused three, or 12%, of the 26 reported contact burns. All three of these burns happened to children under five. A heater, barbeques, an unidentified machine, an oven, wax and woodstoves were each the culprits in two, or 8%, of contact burns. An assault, a car part, an engine, a fireplace, flammables, food, heated metal, propane, and a stove each caused one, or 4% of the contact burns in 2002. There were two unidentified causes of contact burns reported in 2002.

Electrical Burn Injuries

Electrical Incidents Caused 3% of Burn Injuries

Twelve (12), or 3%, of the 368 burn injuries reported in 2002 were caused by electrical accidents. All but one of the electrical burn victims were male. Seven of these incidents occurred during work-related activities, all of these victims were men.

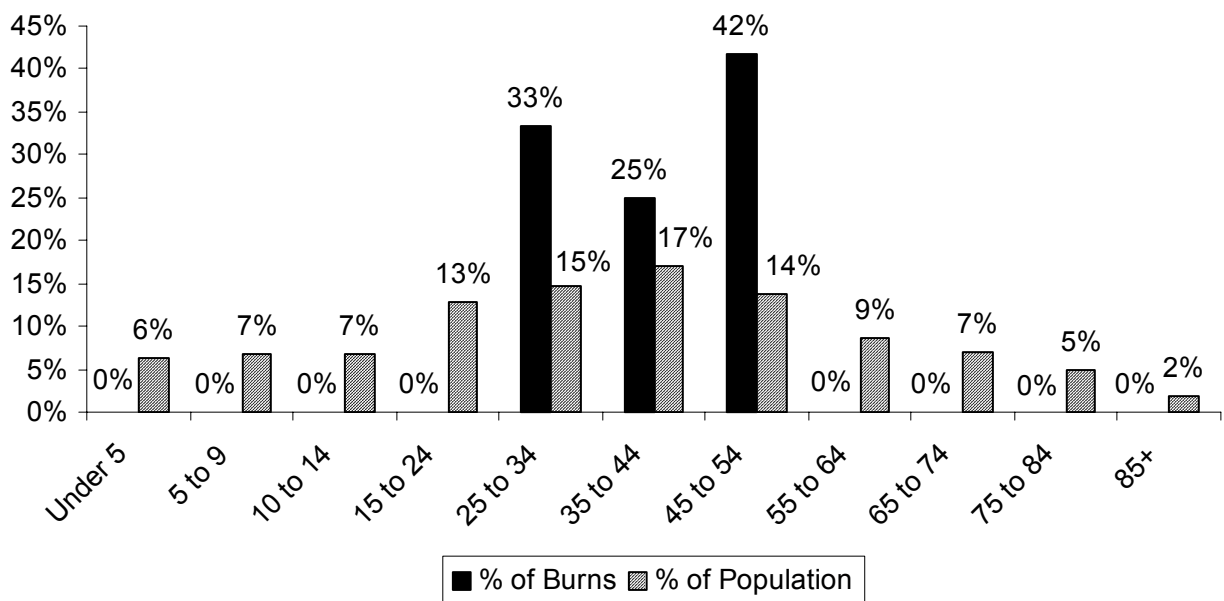
Electrical Burn Injuries by Gender



All Electrical Burn Victims Were Between the Ages of 27 and 53

No one under the age of 27 and no one over the age of 53 received a burn from an electrical source. Four (4), or 33% of the victims, who received electrical burns, were between 25 and 34; they were twice as likely to be an electrical burn victim. People aged 35 to 44 received three, or 25%, of the reported electrical burns, they were 1 ½ times more likely to be an electrical burn victim. Forty-two percent (42%) were between 45 and 54.

Electrical Burn Injuries by Age Group



1/2 of Electrical Burns Were Caused by Undefined Electrical Accidents

Six (6), or 50%, of the electrical burn injuries in 2002 were from undefined electrical accidents. Electrocutions accounted for four, or 33%, of electrical burns. An appliance and a single flashburn³ each caused 8% of these burns.

Woman Tries To Commit Suicide by Electrocution

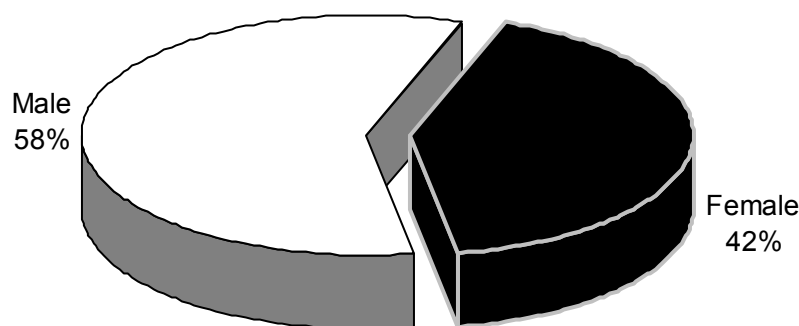
On September 18, 2002, a 40-year old Manchester, New Hampshire woman climbed the electrical pole outside of her home. In an apparent suicide attempt she made contact with the electrical wires. After electrocuting herself she fell approximately 30 feet to the ground. She was transferred from a New Hampshire hospital to the Trauma and Burn Center at Brigham and Women's hospital in Boston. The patient had received burns to over 30% of her body surface area. The victim survived.

Burn Injuries Caused by Chemicals

Chemical Exposures Caused 3% of Burn Injuries in 2002

Twelve (12), or 3%, of the 368 burn injuries reported in 2002 were caused by exposure to chemicals. Fifty-eight percent (58%) of the 12 victims were male and 42% were female. Health care facilities reported that 4, or 33%, of the 12 chemical burn victims were working when injured.

Chemical Burn Injuries by Gender

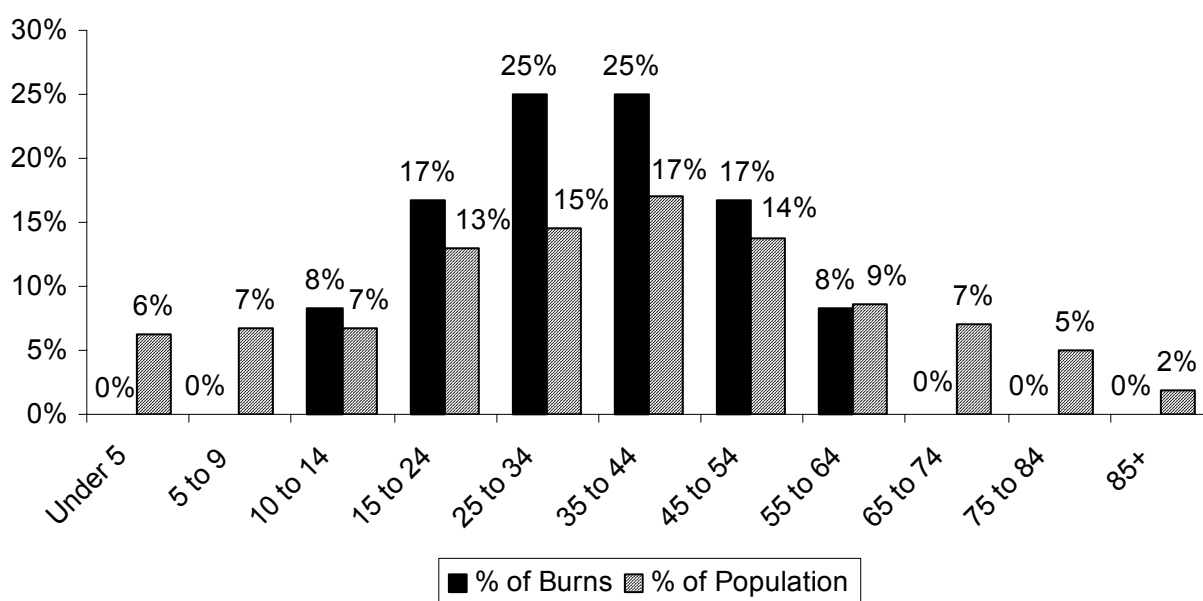


³ A flashburn is a burn caused by a short-term exposure to super-heated air generally from an explosion; there is no direct contact with flame.

1/2 of Chemical Burn Victims Were Between 25 to 44 Years Old

None of the chemical burn victims were under ten years old. One victim was between the ages of 10 and 14, accounting for 8% of the reported burn injuries caused by chemicals; two victims accounting for 17%, were between 15 and 24. Three (3), or 25%, were between the ages of 25 and 34; another three, or 25%, were between 35 and 44; two, or 17%, were between 45 and 54; and the last victim, or 8%, was between the ages of 55 to 64, burned by exposure to chemicals. No one over the age of 55 suffered a burn caused by a chemical. The youngest victim was a 13-year old girl and the oldest victim was a 60-year old man and woman.

Chemical Burn Injuries by Age



Seventy-five percent (75%) of the chemical burns in 2002 were due to the chemical coming into contact with the victim's body; 8% were due to an explosion, another 8% was a flame burn injury and the last 8% was due to a structure fire.

Woman Working On Wharf Burned by Chemicals

On May 22, 2002 a 25-year old female was at work on a wharf on Nantucket. A corrosive liquid was spilled on the victim. Chemical burns covered 18% of her body surface area.

Gasoline Related Burn Injuries

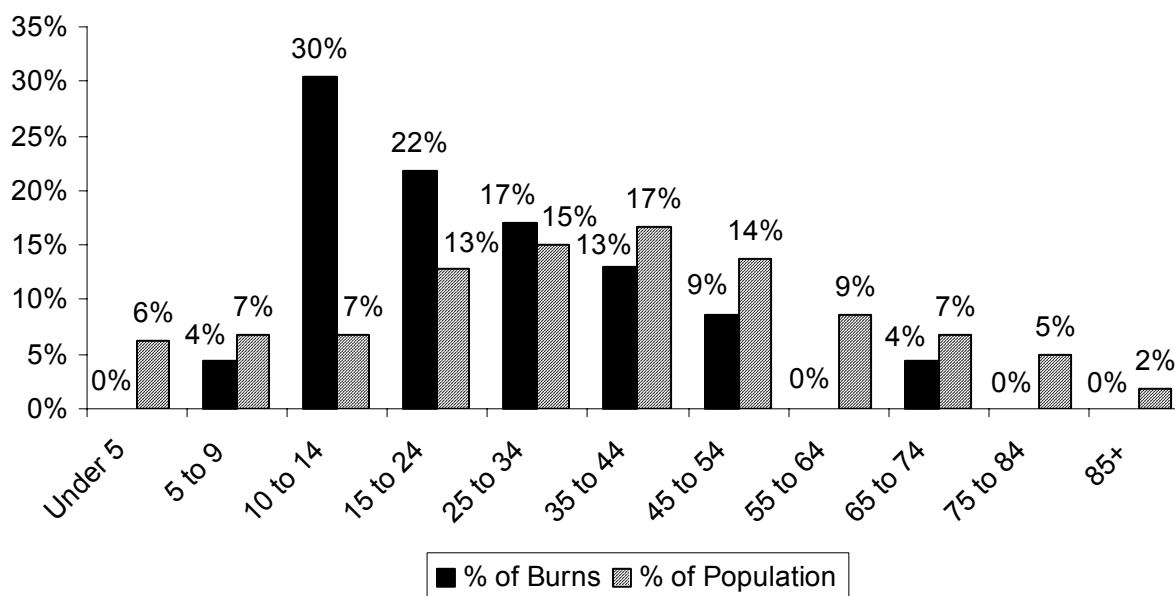
Gasoline Involved in 6% of Reported Burn Injuries

Gasoline was involved in 23, or 6%, of the 368 burns reported to M-BIRS in 2002. Eight, or 62%, of the gasoline related burn injuries caused flame burn injuries. Ten (10), or 43%, of the burn injuries involving gasoline were caused by fires. Another 10, or 43%, were the result of flame burn injuries. Three (3), or 14%, were the result of chemical explosions. All 23 gasoline related burn victims in 2001 were men. Only two of the incidents occurred during work-related activities, accounting for 9% of all gasoline related burn injuries.

Over 1/2 of Gasoline-Related Burn Victims Were Between the Ages of 10 and 24

There were no victims under the age of five. One victim, or 4%, was between 5 and 9 years of age. Seven (7), or 30%, of the victims were between the ages of 10 and 14 years old. This age group has historically been the most at risk for these types of injuries. Children in this age group were four times as likely to receive a gasoline-related burn. Five (5), or 22%, of the victims were between 15 and 24; four, or 17%, were between 25 and 34; three, or 13% were between 35 and 44; two, or 9%, were between the ages of 45 and 54, while the last victim was in the age group 65 to 74. No one between the ages of 55 and 64 and over the age of 72 was the victim of one of these burns. There was only one gasoline related burn injury to anyone over the age of 52. The youngest victim was a five-year old boy and the oldest victim was 72-year old man.

Gasoline Burns by Age



It is actually gasoline vapors that burn, not the liquid itself. The vapors are generated at very low temperatures, are heavier than air and can travel a distance to find a spark. A spark or lit cigarette is enough to light the invisible fumes that may linger on clothing. Gasoline is a tool, but a dangerous one, and it demands respect.

On March 29, 2002 at 10:10 p.m., the Springfield Fire Department was called to a two-family residence for a reported structure fire. What they found was a 24-year old man with burns to 90% of his body. The victim had been working outside on his moped when some of the gasoline fell onto his gloved hand. When he came inside to attend to something on the stove, the gasoline ignited his glove and then the rest of his clothes. He was found in the basement by police officers that were also dispatched to the scene. The victim was transported to a local hospital and then med-flighted to a hospital in Boston for further treatment. He has since been released from the hospital.

Some Safety Measures

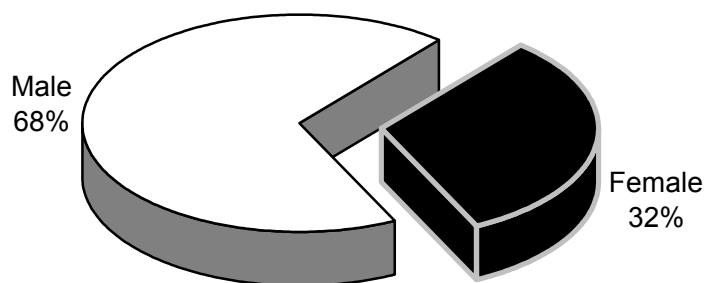
- ☛ If you must store gasoline, store it outside the home in approved safety cans away from open flames (i.e. water heaters and pilot lights) and out of reach of children.
- ☛ Never regularly carry gasoline in your trunk.
- ☛ A one-gallon approved can could be carried empty to be used only for emergencies.

Burns Caused by Cooking Activities

Cooking Activities Caused 16% of Reported Burn Injuries

Cooking activities caused 60, or 16%, of the 368 burn injuries reported to the Massachusetts Burn Injury Reporting System in 2002. Forty-one, or 68%, of the 60 victims were male and the other 19, or 32%, were female. Nine, or 15%, of the 60 people burned by cooking activities were working when injured.

Cooking-Related Burns by Gender

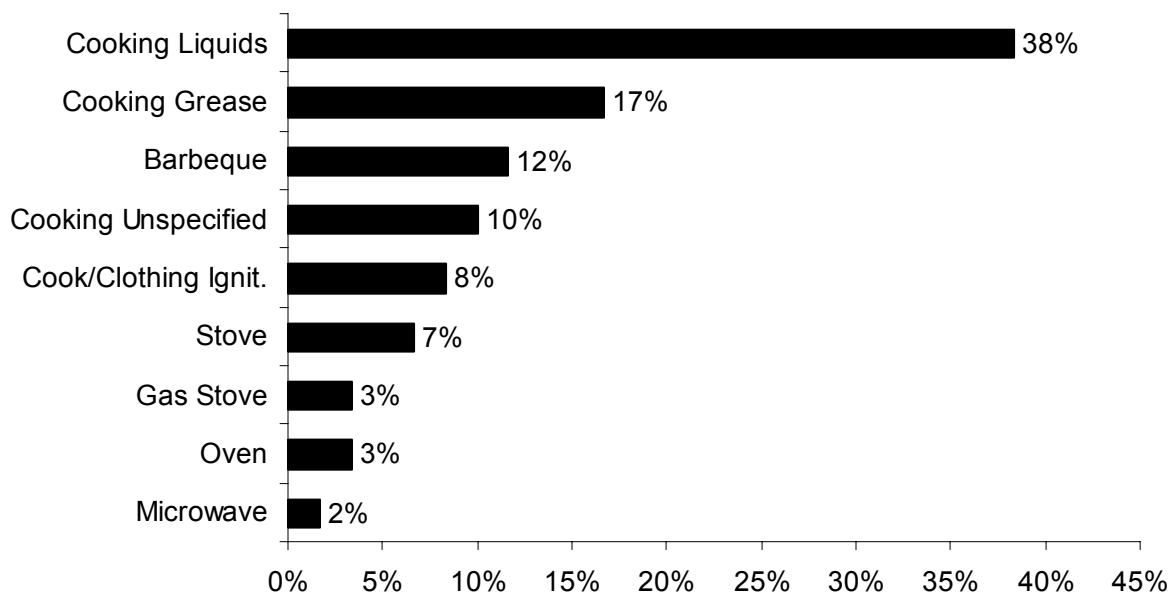


Thirty-six (36), or 60%, of the 60 burn injuries caused by cooking were scalds. Twenty-two (22), or 61%, of these scald victims were injured by hot cooking liquids and cooking grease scalds accounted for other eight, or 22%, of the victims. Five, or 8% of the victims, were burned when

their clothing ignited while cooking; a total of 15, or 25% of cooking-related, burns were flame burns. Five victims received their burns from coming into contact with hot stoves, or other cooking equipment, causing 8% of these burns. Two house fires caused by cooking injured two people, or 3%, of the cooking-related burn victims.

The following graph shows the leading causes of cooking related burn injuries in Massachusetts in 2002 regardless of the type of burn.

Leading Causes of Cooking Burn Injuries



Children Under 5 Are Four Times as Likely to be Burned by Cooking Activities

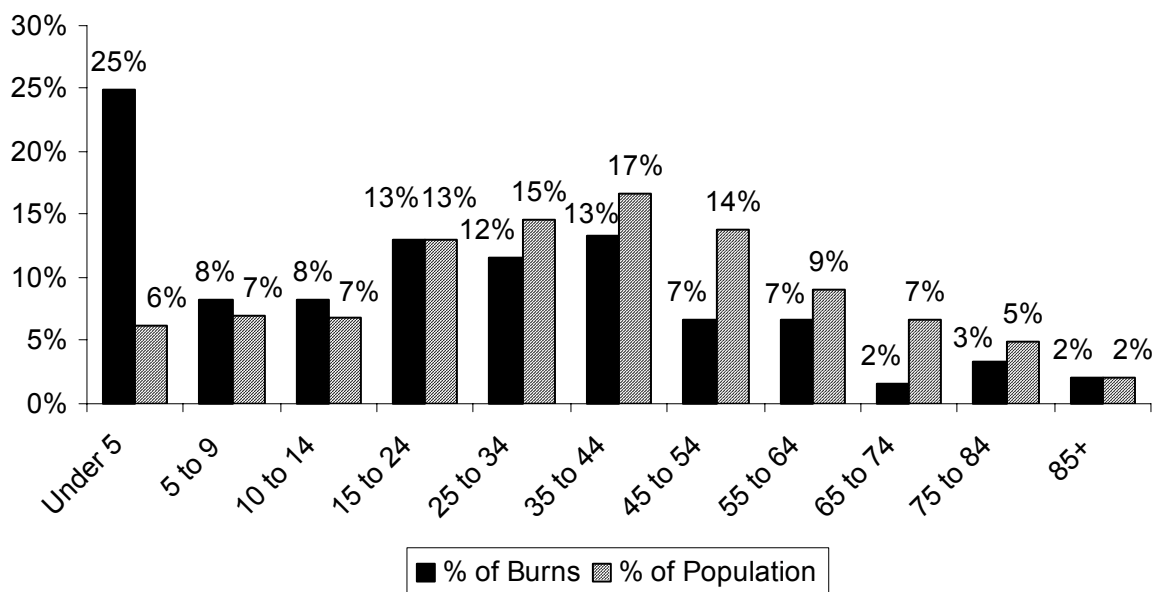
Fifteen (15), or 25%, of the cooking-related burn victims were under age five. This age group was four times as likely to be burned by cooking related activities. Five, or 8%, were aged between five and nine years of age; another five, or 8%, were between 10 and 14; eight, or 13%, were between 15 to 24 years old; seven, or 12%, were between 25 and 34; another eight, or 13%, were between 35 and 44; four, or 7%, were between 45 and 54; another four, or 7%, were between 55 and 64; one victim, or 2%, was between 65 and 74; two, or 3%, of the victims belong to the age group between 75 and 84 years of age; and the last victim, accounting for 2% of all the victims to receive a cooking-related burn, was over the age of 85. The youngest victim of a cooking-related burn was a three-month old boy, while the oldest victim was a 90-year old man who received his burn injuries from a clothing ignition while cooking.

The cause of burns varied with age. Pre-schoolers generally do not cook. They do, however, grab pot handles and sometimes get underfoot when adults are cooking. Cooking liquids or cooking grease frequently scalds them. Parents should keep young children away from the stove and food preparation areas while adults are cooking.

Young adults between the ages of 15 and 24 are members of the age group with the second most victims burned in a cooking related activity in 2002. The main causes of their cooking related burns were four scalds from cooking liquids 50%; and one each, or 13%, a scald from cooking (not specified), a gas stove explosion, contact with a gas barbeque and contact with an oven.

Older adults over the age of 65 are also more likely to be burned while cooking. Four older adults received burn injuries as a result of cooking in 2002. Three, or 75%, of these victims were men and one, or 25%, was a woman. The three men, or 75%, of cooking injuries to older adults were the result of the victim's clothing igniting while they were cooking, while the female victim (25%) received a flame burn from cooking grease.

Cooking Burn Injuries by Age Group




Clothing Ignitions While Cooking

In 2002, five, or 8% of the victims with cooking-related burns, were injured when their clothing ignited while cooking. All five of the victims of clothing ignitions while cooking were men; three were over the age of 65. Loose-fitting sleeves can come into contact with burners and catch fire.

According to data collected by the Massachusetts Fire Incident Reporting System, unattended and other unsafe cooking practices caused 3,841 fires in 2001. These fires killed four civilians and caused 107 civilian injuries and 31 fire service injuries along with \$12 million in losses. Many of these people also suffered from smoke inhalation.

Safety Measures

- ◆ Never leave cooking food unattended.
- ◆ Keep children at a safe distance from all hot items by using playpens, high chairs, etc.
- ◆ Create a safe zone for children.
- ◆ Test all heated food before giving it to young children.
- ◆ Keep pot handles turned in over the stove or countertop.
- ◆ Always use oven mitts or potholders.
- ◆ Secure loose sleeves or wear short sleeves while cooking.
- ◆ Keep an approved and maintained fire extinguisher easily accessible on the kitchen wall.
- ◆  Never use water on a stovetop grease fire.
- ◆ Read and follow directions when using microwave ovens and other cooking appliances.
- ◆ Children should not be allowed to use cooking/heating appliances until they are mature enough to understand safe-use procedures and tall enough to safely handle items and reach cooking surfaces.
- ◆ If cabinets exist over cooking surfaces use them to store only items that will not be needed during cooking.
- ◆ When barbecuing, use only charcoal lighter fluid to start a fire. Once the coals have been ignited, never add more charcoal lighter fuel to the fire; the container may explode in your hand.
- ◆ Dispose of used coals in a proper container away from the house or porch.

Serious Burns From Cooking

On August 3, 2002 a 47-year old woman received scald burns to 35% of her body surface area when she spilled boiling water that she was cooking with on her front and back torso

On September 2, 2002, a 90-year old man had his sleeve ignite while he was reaching over the stove while cooking. He received a burn to the entire area of one of his arms.

On Christmas, 2002 a 27-year old man burned over 24% of his body surface area in a house fire. The fire was caused by a pot filled with oil overheating on the stove.

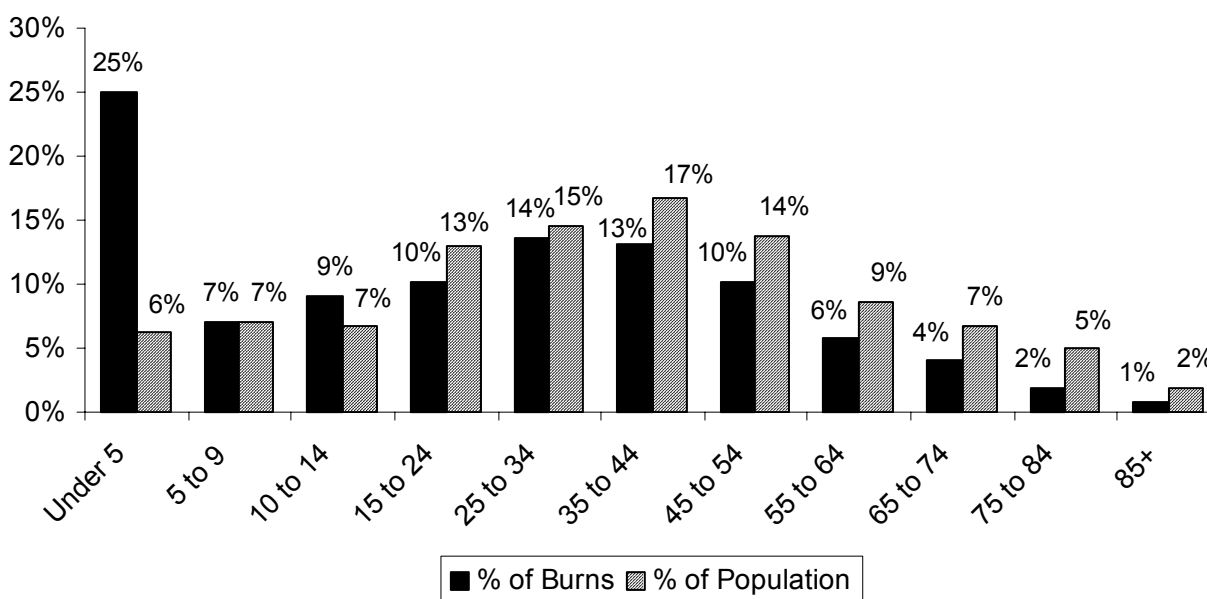
Burn Injuries by Age Group

Although burn injuries were reported in all age groups, very young children suffer more than their share. One quarter (25%) of all burn victims were children under the age of five. Ninety-two (92) children under age five were seriously burned in 2002. Twenty-four (24), or 7% of the burn injuries, occurred to children aged five to nine; 33, or 9%, were youths aged 10 to 14. Thirty-seven (37), or 10% of the burn victims, were young adults aged 15 to 24. Fifty (50), or 14% of 2002 burn victims were adults aged 25 to 34. Forty-eight (48), or 13%, were people aged 35 to 44. Thirty-seven (37), or 10% of the burn injuries, occurred to adults aged 45 to 54; 21, or 6% of people aged 55 to 64, were burned; 15, or 4% of all burn victims, were older adults in the 65 to 74 age group, seven, or 2% were in the 75 to 84 years old age group and three adults over the age of 85, or 1% of all reported burn victims in 2002, received burns of more than 5% of their body surface area. There was one victim with an unknown age.

Children Under 5 At Highest Risk of Burn Injuries

The graph below compares the percentage of burn injuries incurred by each age group with the percentage of that age group in the general population. Only 6% of the population in Massachusetts is under the age of five (source: 2000 U.S. Census data). We would expect therefore that children under five would account for a maximum of 6% of the burn injuries. In fact, they accounted for 25% of the reported burn injuries in 2002, making them four times more likely to suffer burn injuries. Children of this age group are the most dependent on others to protect them and are not able to move out of harm's way unassisted.

Burn Injuries by Age Group



The threat of burns is most severe for children less than two-years old. Fifty-six (56) babies under the age of two, accounted for 15% of all burn victims, but all children under the age of five accounted for 6% of the Massachusetts population.

Scalds were the leading cause of burn injuries in every age group except children between the ages of 10 and 14, adults between the ages of 35 and 44, and older adults over the age of 65. Flame burns were the leading cause for these the age groups 10 to 14 and over 65 years old. Burns from fires was the leading cause for the 35 to 44 year old age group.

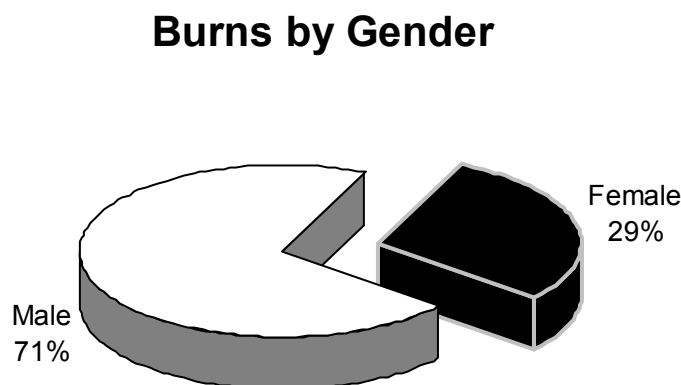
To learn more about the specific causes and prevention strategies for each age group, please look at the age specific sections within *Burn Injuries by Age Group*.

Causes of Burn Injuries by Age and Gender

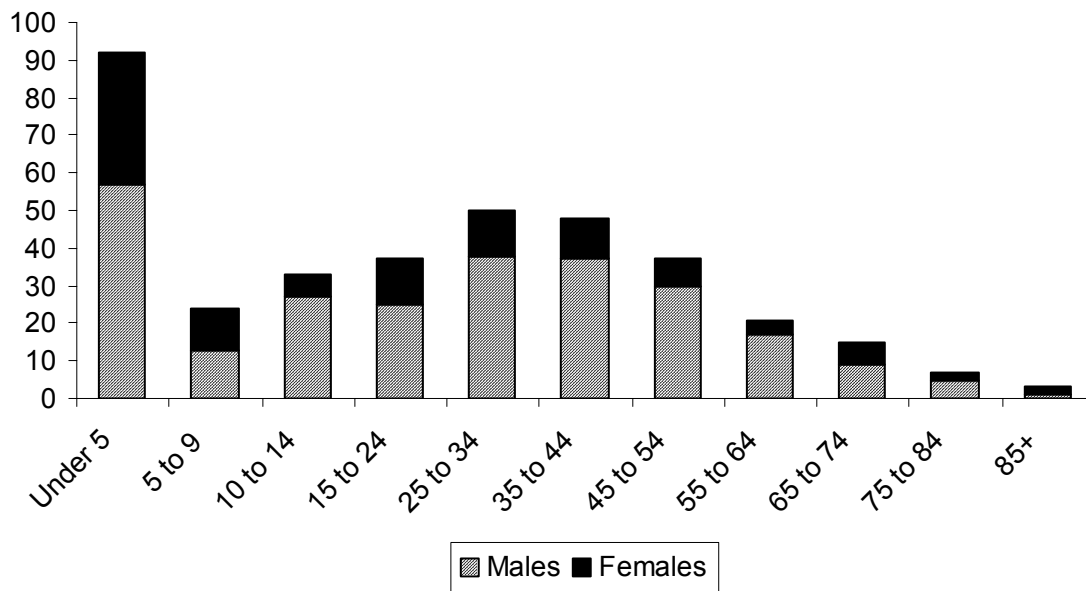
The leading causes of burn injuries vary widely between age groups depending on the nature of activities in which people are involved. Children under five are busy exploring their environment and reaching for anything in their grasp. Forty-nine percent (49%) of the burns incurred by these young children were scalds caused by hot beverages and another 16% were caused by hot tap water scalds. Cooking grease scalds, the improper opening of hot car radiators, gasoline and chemicals were frequent causes of burn injuries to older teens and young adults.

Parents of young children must be educated about the danger of scalds from hot beverages, cooking liquids and tap water. Teens and young adults need information about cooking safely, procedures to follow when a car overheats and the correct uses of gasoline. To be effective, burn prevention educators must develop strategies that address the risk faced by each age group.

Up until 85 years of age, males were burned more frequently than females. In 2002, almost three-fifths of the burn victims were male. Two hundred and fifty-nine (259), or 71%, of the 368 burn victims were male, and 108, or 29%, were female.



Burn Victims by Age and Gender



Children Under 5

1/4 of Reported Burns Incurred by Children Under 5

Ninety-two (92), or 25%, of the burn injuries reported to M-BIRS in 2002 were incurred by children under five years old. According to the 2000 U.S. Census, only 6% of Massachusetts residents are under the age of five. Children under five were four times as likely to be burned as were members of the general population. No other age group faced a risk this high. Sixty-two percent (62%) of burned pre-schoolers were male and 38% were female.

Scalds Caused Over 3/4 of Burns to Pre-Schoolers

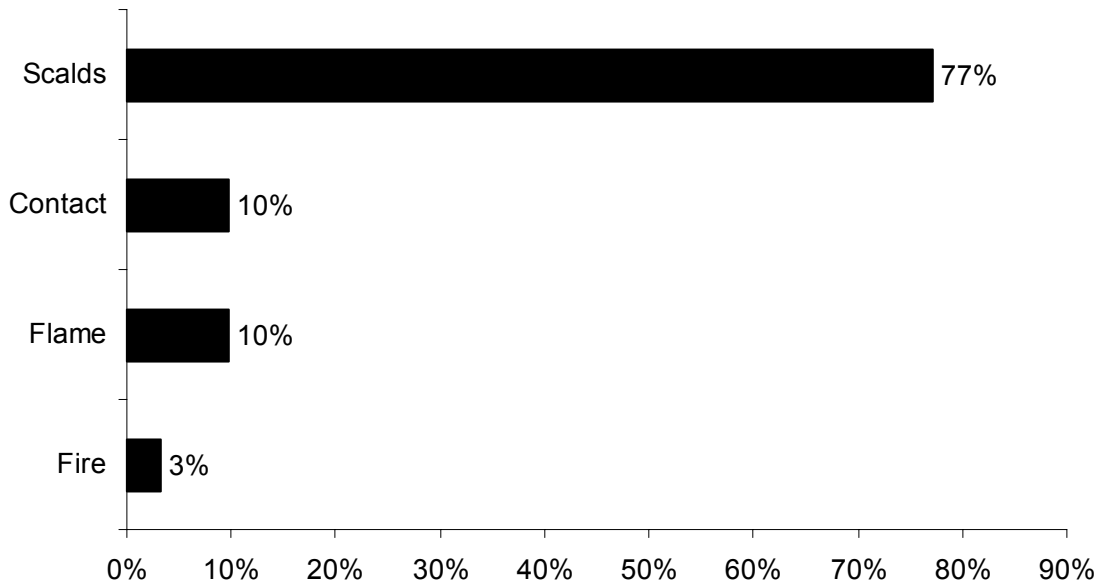
Scalds caused 71, or 77%, of the burn injuries incurred by children under five. Forty-five (45) were from hot beverages, 15 from hot tap water, five from hot cooking liquids, three from cooking grease, two from unidentified cooking activity and one from a hot pipe that burst.

Contact burns accounted for nine, or 10%, of the injuries to children under the age of five. Three children received their burns by touching a hot clothes iron. One burn was received by touching a fireplace. Another child received burns by touching a heater. Contact with an oven, a stove and hot wax caused the last three burn contact burn injuries to children under five in 2002.

Flame burns caused another nine, or 10%, of burns to this age group. Three children had their clothing catch on fire when it came into contact with a lit candle. Another three received their flame burn injuries from barbecues. One child was injured while playing with fireworks. An unknown flame burn injury accounted for the last flame burn injury to children under five.

Fire caused three, or 3%, of the injuries to this age group. All three children of these children under five were burned in house fires.

Leading Causes of Burns to Children Under 5



Children Ages 5 to 9

7% of Reported Burn Injuries Incurred by Children 5-9

Twenty-four (24), or 7%, of the burn injuries reported in 2002 were incurred by children between five and nine years of age. Thirteen (13), or 54%, of the burn victims were male, and 11, or 46%, were female. Children in this age bracket accounted for 7% of the population of Massachusetts and 7% of the injuries in 2002.

Scalds Caused Almost 1/2 of All Burns to Children 5-9

The leading causes of burn injuries to children aged five to nine were scalds, fires, flame burns, contact burns, and explosions.

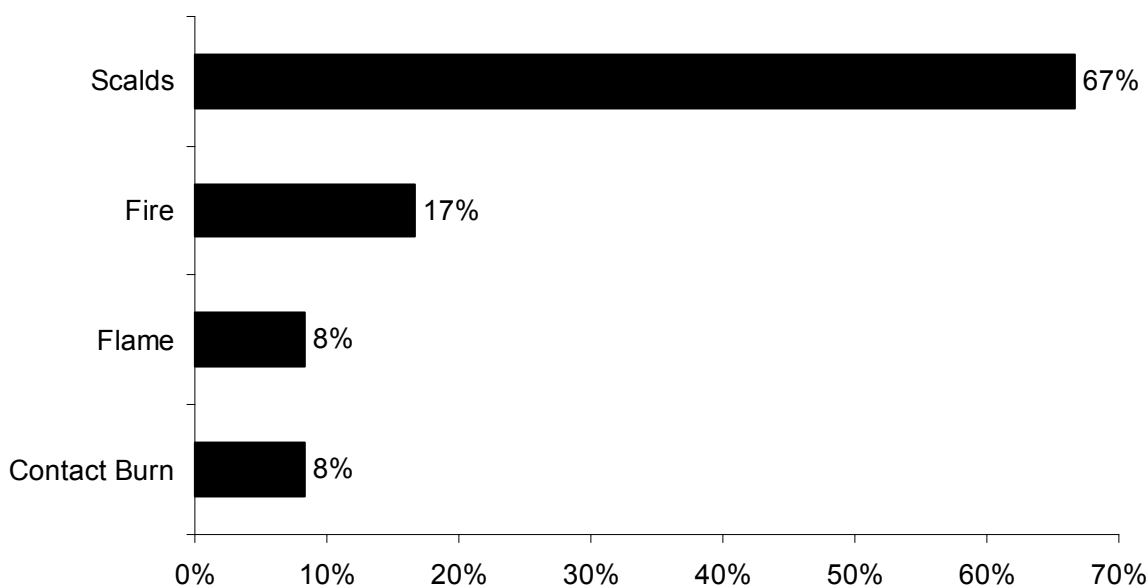
Scalds caused 16, or 67%, of the burn injuries incurred by children aged five to nine in 2002. The scald burn injuries included seven from hot beverages, four from hot tap water, two from cooking liquids, another two from unspecified cooking activities and one from food.

Three house fires and a bonfire accounted for four, or 17%, burn injuries to children between the ages of five and nine.

Contact burns caused two, or 8%, of the burns to children aged five to nine. One child was injured when he touched a hot car part. The other touched a hot woodstove.

Flame burns accounted for another two, or 8%, of the burn injuries to this age group. Each of the four injuries was from a different cause. One child was “playing” with gasoline. The other child in this age category who suffered a flame burn injury was too close to the stove burning 35% of his body surface area.

Leading Causes of Burns to Children 5 to 9



Children Ages 10 to 14

9% of Reported Burns Incurred by Children 10-14

Children between the ages of 10 and 14 suffered 33, or 9%, of the burn injuries reported in 2002. Twenty-seven (27), or 82%, were male and six, or 18%, were female. Children in this age bracket accounted for 7% of the population in the Commonwealth of Massachusetts but 9% of the total reported burn injuries. At this age, children are exploring their environment more on their own, but often without the maturity or experience to reason out cause and effect.

Flame Burns Were the Leading Cause of Burns to Children 10-14

Flame burns caused 17, or 52%, of the 33 burn injuries to children ages 10 to 14. This is one of three age groups in which scald burns were not the leading cause of burn injuries. The causes of flame burn injuries included four ignitions of gasoline, three of which involve children playing with gasoline. Two victims received their injuries from portable heaters. An aerosol can, an ignition of alcohol, one flame up from a barbeque, hot ashes left over from burning brush, one child playing with a lighter, one child playing with some matches, an unspecified clothing

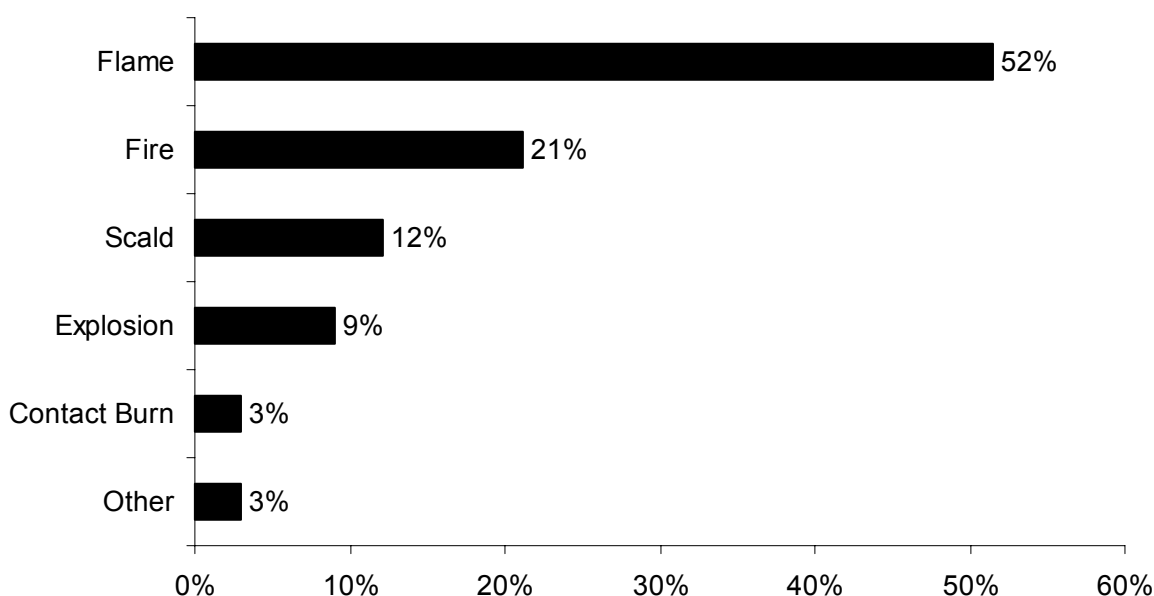
ignition, one clothing ignition while cooking, a cooking grease ignition, huffing and a hot lamp were each causes of one flame burn injury to this age group.

Seven, or 21%, of the burn injuries to this age group were due to fires; three pre-teens were injured in motor vehicle fires, two were injured in unspecified fires; and one received burns from a brush fire and one from a house fire.

Scalds represented four, or 12%, of the burns incurred by children aged 10 to 14. Two adolescents were burned by hot tap water; another two were injured when they spilled cooking liquids on themselves. This is only one of three age groups where scalds were not the leading cause of burns.

Three, or 9%, of burn injuries incurred by this age group were from explosions. All three received their burns from fireworks explosions. Contact with a hot machine and a chemical burn each accounted for 3% of the burn injuries to this age group.

Leading Causes of Burns to Children Ages 10 to 14



Ages 15 to 24

10% of Reported Burn Victims Between 15-24

Teens and young adults between the ages of 15 and 24 incurred 37, or 10%, of the burn injuries reported in 2002. Twenty-five (25), or 68%, were male and 12, or 32%, were female. Young adults aged 15 to 24 account for 13% of the population of Massachusetts and 10% of the burn

injuries in 2002. Four (4), or 11%, of the burn injuries incurred by this age group were work-related.

Over 1/3 of Burns Were Scalds

Scalds were the leading cause of burn injuries to this age group. Thirty-five percent (35%) of the burn injuries incurred by people aged 15 to 24 were scalds. Four victims received burns from hot cooking liquids, three from hot tap water, two received scalds from car radiators, and one each from an assault, a hot beverage, food and an unspecified cooking act.

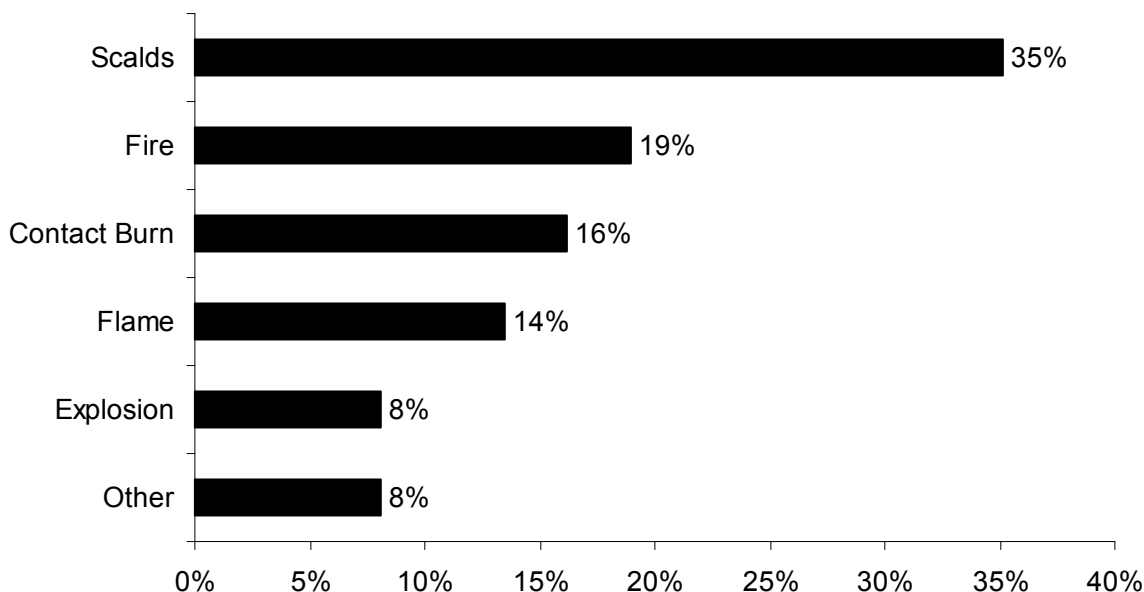
Seven (7), or 19%, of the burn injuries to people 15 to 24 years of age were caused by three house fires, two bonfires, and one chemical structure fire.

Contact burns accounted for six, or 16% of burn injuries suffered by victims between the ages of 15 and 24. An assault, contact with hot food, contact with a barbeque, oven and hot wax and an unspecified contact burn each accounted for one contact burn injury to this age group.

Five (5), or 14%, of the burn injuries were caused by flames. Three were caused by gasoline. Burns from ignitable liquids, and a machine accounted for one injury each.

Explosions injured three, or 8%, of people in this age category. One injury was the result of improper use of explosives, the other two injuries were caused by an explosion involving a gas stove and fireworks.

Leading Causes of Burns to People Ages 15 to 24



Three (3), or 8%, of the burn injuries incurred by this age group were grouped in the “other” category: a chemical burn, a sunburn and a flashburn.

Ages 25 to 34

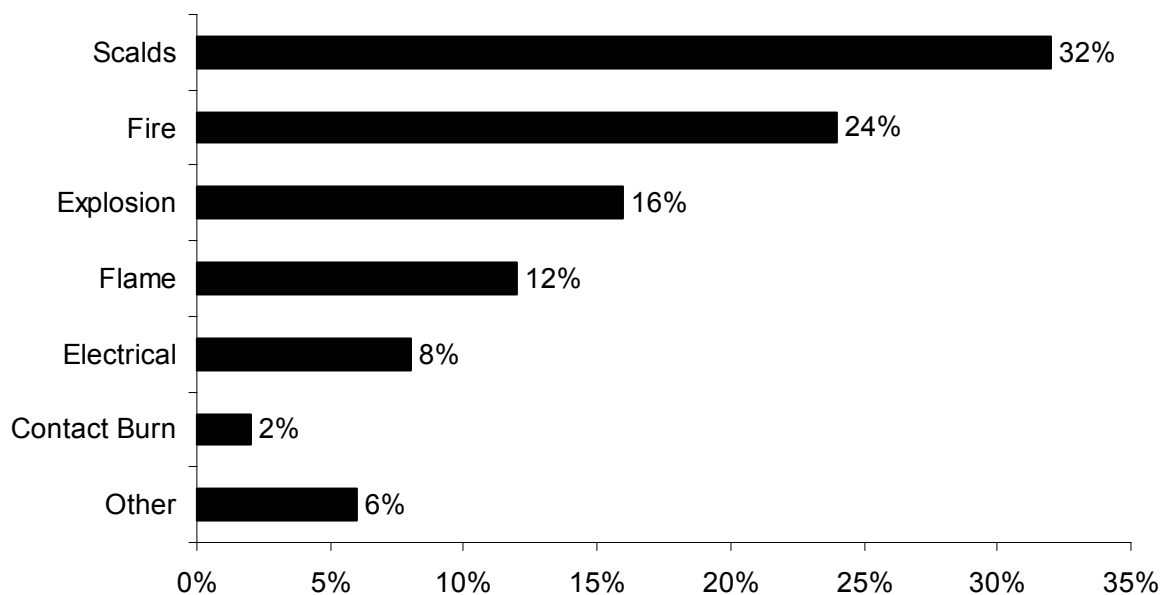
Over 1/4 of Reported Burns Were Work-related

Fifty (50), or 14%, of the burn injuries reported in 2002 were incurred by people between 25 and 34 years of age. Thirty-eight (38), or 76%, of the victims were male and 12, or 24% were female. Thirteen (13), or 26%, of the burn injuries suffered by this age group were work-related. People between the ages of 25 and 34 accounted for 15% of the population of Massachusetts while accounting for 14% of the total number of burn injuries reported in 2002.

Almost 1/3 of Burn Injuries Were Scalds

Scalds were the leading cause of burns to people between the ages of 25 and 34. Sixteen (16) burns accounted for 32% of the burn injuries to this age group. These scald burns included four burns from hot car radiators, three from hot tap water, two each from hot beverages and cooking liquids, and one each from an unspecified cooking act, an act of domestic violence, cooking grease, steam and an unspecified scald burn.

Leading Causes of Burns to People Ages 25 to 34



Twelve (12) fires – nine house fires, one motor vehicle fire, one professional firefighter, and one unspecified fire that involved gasoline – accounted for 24% of the injuries to this age group. Each fire injured one person.

Eight (8), or 16%, of the burns to 25 to 34 year olds were caused by explosions; two involved gasoline, one was caused by an explosion of an aerosol can and another was caused by cooking liquids. Flammables, natural gas, propane and a successful attempt of self-immolation were each involved in one explosion.

Flame burns caused six, or 12%, of the injuries to 25-34 year olds. These flame burns included two from propane, a flame burn injury from a chemical, a case of self-immolation where the victim died, a stove and a cutting torch.

Four (4) victims, accounting for 8% of the injuries to this age group, were injured by electrical burns. Two victims received unspecified electrical burns, one individual was electrocuted, and one victim received their electrical burn from an appliance.

Another three (3), or 6%, of the burns incurred by this age group were classified as “other” burns. Two were chemical burns, and one was an act of self-immolation.

Contact burns accounted for one, or 2%, of the burn injuries to people between the ages of 25 and 34. This burn was incurred from contact with a woodstove.

Ages 35 to 44

13% of Reported Burn Victims Were Between 35 and 44 Years of Age

Forty-eight (48), or 13%, of the burn injuries reported in 2002 occurred to people between the ages of 35 and 44. Thirty-seven (37), or 77%, of the victims were male and 11, or 23%, of the victims were female.

Over 1/4 of Burn Injuries To This Age Group Were Work-Related

Thirteen (13), or 27%, of the burn injuries incurred by this age group were work-related. Adults between the ages of 35 and 44 accounted for 17% of the Massachusetts population but only 13% of the reported burns in 2002.

31% of Burn Injuries Were From Fires

Burn injuries from fires were the leading cause of burn injuries to adults between the ages of 35 and 44. Fifteen (15) fires accounted for 31% of the burn injuries to this age group. Eleven (11) house fires; three brush fires, and one motor vehicle fire accounted for all 15 burn injuries. This is the only age group where fire was the leading cause of burn injuries; and one of three age groups where scalds wasn't the leading cause of burn injuries in 2002.

Flame burns were the second leading cause of burn injuries to adults between the ages of 35 and 44. They caused 11, or 23%, of the burn injuries to this age group. Three of the flame burns were from acts of self-immolation. An aerosol can, a gas barbeque, a candle, a flashburn, a gas stove, gasoline, a kerosene heater and propane each caused one flame burn injury in this age group.

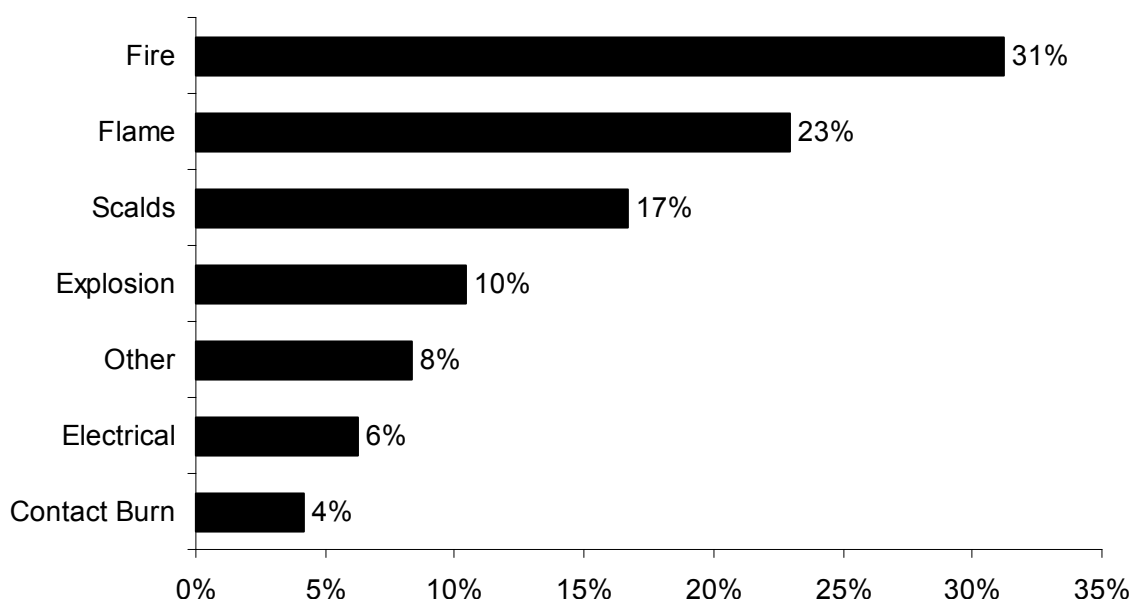
Eight (8) victims of flame burn injuries to this age group received their injuries from cooking. Four were scalds from cooking liquids and one was a scald from hot cooking grease. One victim was burned in a house fire started by the microwave; another victim received a flame burn injury from a gas barbeque; and the last victim received a flame burn injury while cooking on a gas stove.

The next leading cause of burns to people between 35 and 44 years of age were scalds. Eight (8), or 17%, of these burn injuries were caused by scalds. These injuries included four scalds from cooking liquids, and one each from a hot beverage, a car radiator, cooking grease, and a pipe.

Explosions accounted for 10% of the total burn injuries to this age group. These five explosions were caused by a boiler, a flammable material, flammables, ignitable liquids, and propane.

“Other” burns accounted for four, or 8% of the injuries to people between the ages of 35 to 44. Three of these injuries were due to chemical burns while the other was due to an assault.

Leading Causes of Burns to People Ages 35 to 44



There were three (3) electrical burns accounting for 6% of the total number of burns for this age group. All three burns were from electrocutions. Two of the three were work-related.

Contact burns accounted for two, or 4% of the burns to this group. One of these injuries was from contact with a hot engine and the other was from a contact burn of unspecified origin.

Man Receives Severe Burns Trying To Control Fire In His Home

A 40-year old Revere man received second degree burns to his hands, right arm, forehead and upper torso. He dragged a burning wicker bookcase out of his house to stop the fire from spreading.

Ages 45 to 54

10% of Reported Burn Injuries Were Between 45 and 54 Years of Age

People between the ages of 45 and 54 incurred 37, or 10%, of the reported burns in 2002. Thirty (30), or 81%, of the victims were male, and seven, or 19%, were female. Nine (9) of the 33 burn victims aged 45 to 54, or 24%, were burned while at work. This age group represents 14% of the population of Massachusetts while it only received 10% of the burn injuries in 2002.

Scalds Cause Almost 1/4 of the Burn Injuries

Scalds were the leading cause of burn injuries to this age group. In 2002, scalds caused nine, or 24%, of the burn injuries to people aged 45 to 54. These scald burns included four from hot car radiators, three from cooking liquids, and one each from hot asphalt and steam.

Flame burns were incurred by eight (8), or 22%, of the burn victims between the ages of 45 and 54. These flame burns were caused by an aerosol can, a clothing ignition from a candle, a clothing ignition from cooking, a heater, an act of self-immolation, a cigarette, smoking and a woodstove.

Burns from fires caused seven (7), or 19% of the burn injuries to victims 45 to 54 years old. Four house fires (11%), a brush fire, a motor vehicle fire which was a successful self-immolation attempt, and a structure fire that began when a car drove into the structure each accounted for 3% of the burn injuries to this age group.

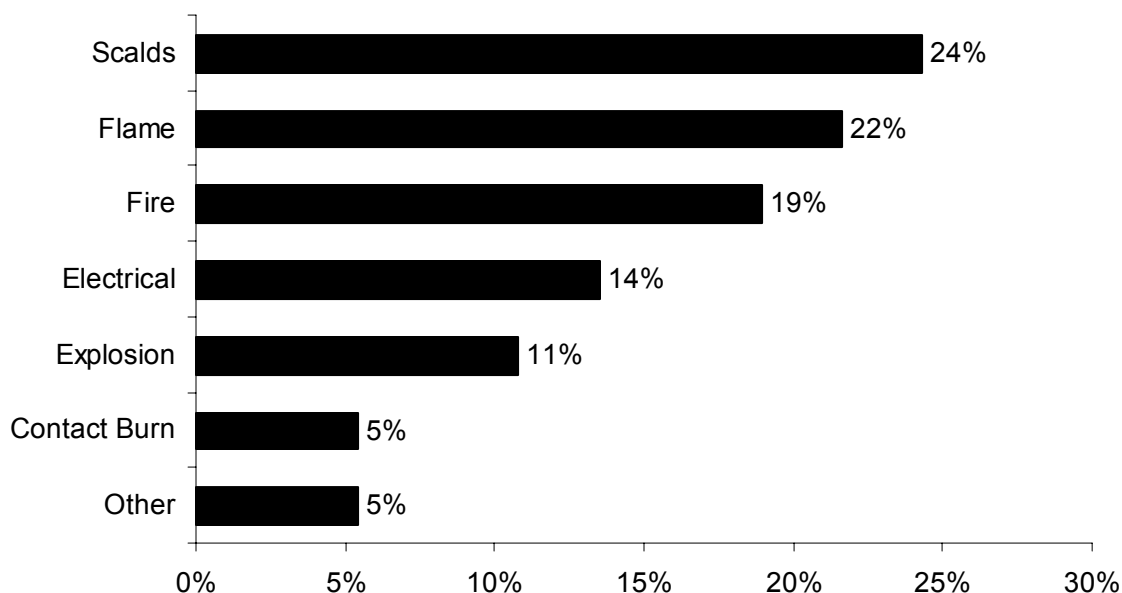
There were five (5) electrical burns, accounting for another 14% of the burns to people between 45 and 54 years of age. Four were from unspecified electrical accidents while the other was from a flashburn.

There were four (4) victims of explosions. They accounted for 11% of the burn injuries to this age group. Two of the explosions were from cutting torch accidents, while the remaining two were caused by gasoline and natural gas.

Two (2), or 5%, of the burns to victims between the ages of 45 to 54 suffered contact burns. One was from contact with flammables and the other contact burn was from contact with a hot machine.

Two (2), or another 5%, of the burn injuries to this age group were attributed to “other” causes. Both of these burns were due to chemical burns.

Leading Causes of Burns to People Ages 45 to 54



Ages 55 to 64

6% of Burn Victims Were Between 55 and 64 Years Old

Twenty-one (21), or 6%, of the burns reported in 2002 were incurred by people between the ages of 55 and 64. Seventeen (17), or 81%, of the victims were male, and four, or 19% were female. Three (3), or 14%, of the 21 burn injuries incurred by people between 55 and 64 years old were reported to be work-related. People of this age group represent 9% of the total population of Massachusetts but only received 6% of the burns in 2002.

Over 1/3 of Burn Injuries Were Scalds

Scalds were the leading cause of burn injuries to this age group. Seven (7), or 38%, of the burn injuries incurred by people between the ages of 55 and 64 were scalds. These scald burns included three from hot cooking grease, two from hot beverages, and one each from hot tap water, a car radiator and a central heater.

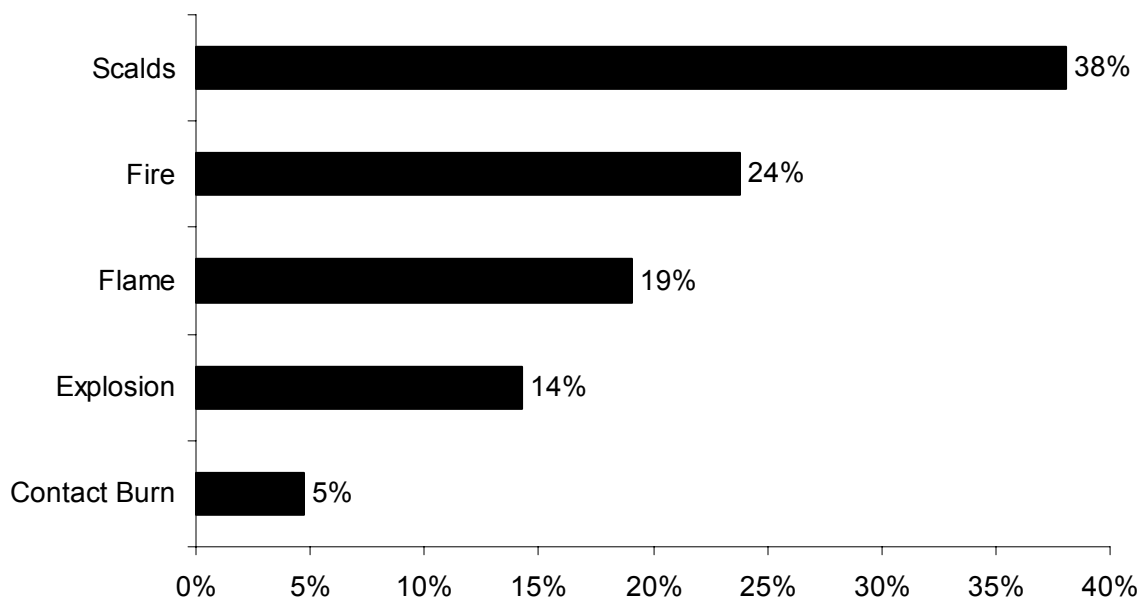
Fires caused five (5), or 24%, of the burn injuries to this age group. Five people in this age group were burned in three house fires, one motor vehicle fire and one brush fire.

Flame burns accounted for four (4), or 19%, of the injuries to this age group. Two of the burns occurred when the victims' were smoking while oxygen was in use, one involved smoking in bed, and one involved a cutting torch accident.

Three (3) victims, accounting for 14% of the injuries to people between the ages of 55 and 64, received their injuries in explosions. Two of these explosions involved propane and the third involved a chemical.

One victim received a contact burn from a barbeque accounting for 5% of the burn injuries to adults between the ages of 55 and 64.

Leading Causes of Burns to People Ages 55 to 64



Over 65

25 Burn Victims Over 65

Twenty-five (25), or 15%, of the burn victims in 2002 were over 65 years old. Fifteen (15) were between 65 and 74; seven (7) were between 75 and 84; and three (3) were over 85 years old. Fifteen (15), or 60% of the victims were male, and 10, or 40%, were female. These percentages are very consistent with those from 2001. Older adults represent 14% of the total Massachusetts population but only 15% of the burn injuries in 2002.

Flame Burns Are the Leading Cause of Burns to Older Adults

Nine (9), or 36%, of the burn injuries to people over the age of 65 can be attributed to flame burns. Four of the burn injuries were attributed to cooking; three were from smoking; another, one from trying to control a fire, and one from gasoline. The last victim of a flame burn injury in this age group was an 85-year old woman who was in a hospital operating room undergoing a surgical procedure. One of the instruments ignited the linens causing burns to her chest and left arm.

Of the cooking-related flame burns, three of the four burns were from clothing ignitions while cooking and the other was from an ignition of cooking grease. Of the smoking-related burns, two of the three injuries were from clothing ignitions while smoking; and the other was from smoking while on oxygen.

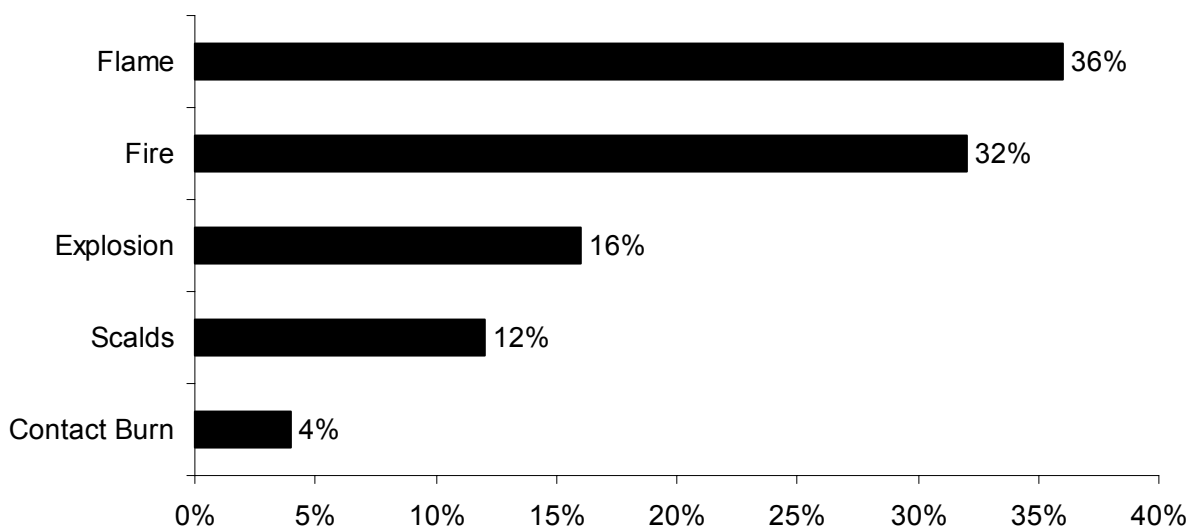
Clothing Ignitions Cause Over 1/4 of Burns To Older Adults

Clothing ignitions to older adults has consistently been an issue. During 2002, seven (7), or 28%, of the burn injuries to those victims over the age of 65 were due to clothing ignitions. These types of injuries accounted for 2% of the total 368 burn injuries reported in Massachusetts in 2002.

Fire was the cause of eight (8), or 32%, of the injuries to adults over the age of 65. Six house fires and one brush fire accounted for all seven fire-related burn injuries. Two of the house fires resulted in fatalities. Both were caused by smoking; one of the two by smoking while on oxygen.

Four (4), or 16%, were caused by explosions. Two explosions were caused by propane; a cigarette lighter exploding and a shredder exploding were each responsible for single burn injuries to older adults. Three (3), or 12%, of the burn injuries to these older adults were due to scalds. Two of these burn injuries were caused by car radiators and one by hot tap water. One (1) victim over the age of 65 received a contact burn resulting in 4% of the burns to this age group. This victim came into contact with a hot heater.

Leading Causes of Burns to Older Adults (65+)



According to the Burn Awareness Coalition, smoking when tired, drinking alcohol or taking medications which can cause drowsiness, wearing loose fitting clothing while cooking, kitchen fires from unattended cooking, and grease fires on the stove top are leading causes of burn injuries to older adults. During 2002, cooking and smoking accounted for 13, or 52% of the reported burn injuries in Massachusetts incurred by older adults.

Safety Tips

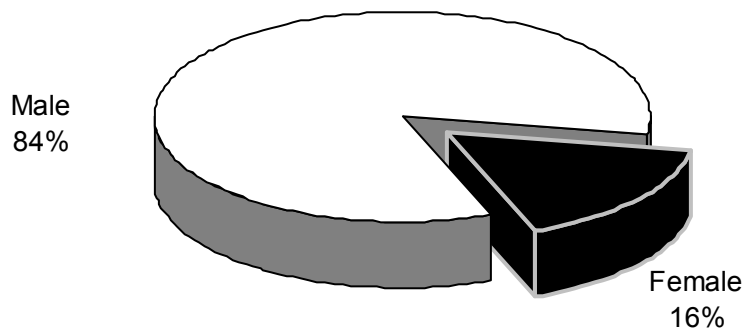
- Do not smoke when you are tired, drinking alcohol or taking medications, which make you drowsy. If you must smoke, make sure there are working smoke detectors in the immediate vicinity.
- Wear clothes with tight fitting sleeves and watch for clothes touching elements on the stove.
- Do not use a cooking stove for heating purposes or for drying clothes.
- Never leave food that is cooking unattended. Set a kitchen timer to remind you to turn off the burners and/or the oven. If you must leave the kitchen, take a wooden spoon or potholder as a reminder that you have left something unattended on the stove.
- Keep stove surfaces clean of built up grease.
- Do not attempt to lift or carry heavy pots of hot liquid or food.
- Cook with the pot and pan handles turned in.

Work-Related Burn Injuries

11% of Reported Burns Occurred at Work

Massachusetts hospitals indicated that 42, or 11%, of the 368 burn injuries reported in 2002 occurred while the victim was at work. Men were much more likely to be burned while working than women. Thirty-eight (38) men, 84%, and four women, 16%, were burned at work in 2002. These figures are very similar to the figures from 2001.

Work-Related Burns by Gender

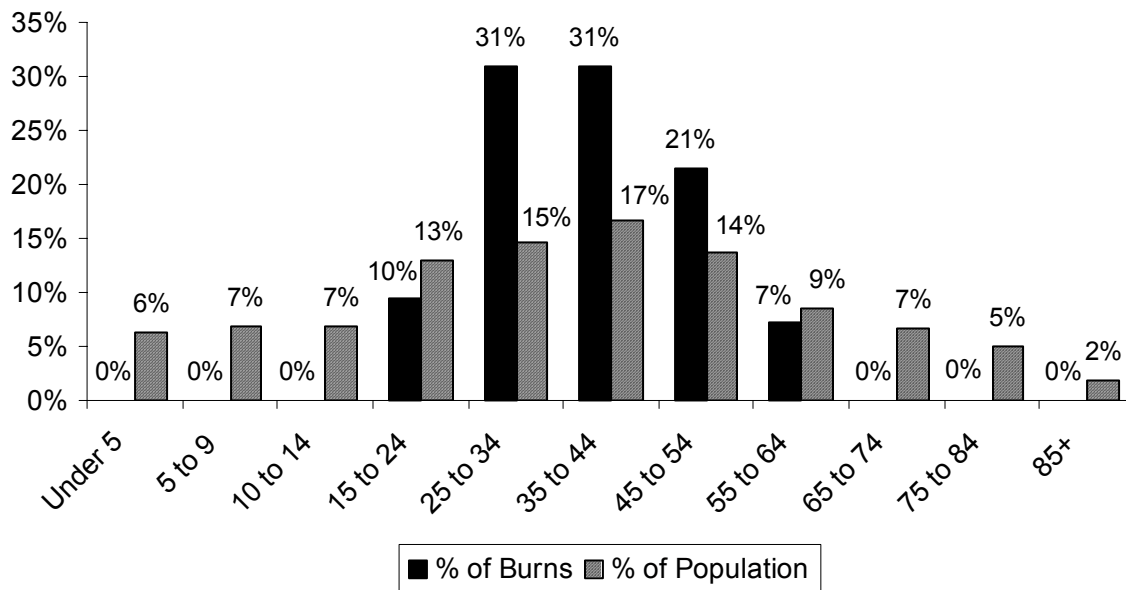


93% of Work-Related Burns Are Incurred by People Between 15 and 54

Four (4), or 10%, of the 42 work-related victims where age was known were between 15 and 24 years of age. Thirteen (13), or 31%, of the victims were between 25 and 34 years of age; another 13, or 31%, belonged to the 35 to 44 age group. Nine (9), or 21%, of work-related burn injuries were victims 45 to 54 years old. The oldest age group to have a work-related burn injury was the 55 to 64 group and they garnered three, or 7% of the burn injuries in the workplace. The

youngest person to receive a work-related burn in Massachusetts in 2002 was a 16-year old girl. The oldest victim to receive a work-related burn was a 64-year old man.

Work-Related Burns by Age Group



Over 1/4 of Work-Related Burns Were Explosions

Twelve (12), or 29%, of the 42 work-related injuries were explosions in 2002, including two from gasoline, two from natural gas and two more from propane; and one each from boiler, flammables, flammable materials and ignitable liquids.

Scalds were the second leading cause of work-related burns in 2002. These eleven (11) injuries accounted for 26% of work-related burns. Three of the burn injuries were the results of hot beverages and another three were from cooking liquids. A car radiator, a central heater, a pipe, steam and hot tap water were each responsible for one work-related scald burn in 2002.

Electrical burns caused seven, or 17%, of work-related burn injuries in 2002. Four were from unspecified electrical accidents while the other three were from electrocutions.

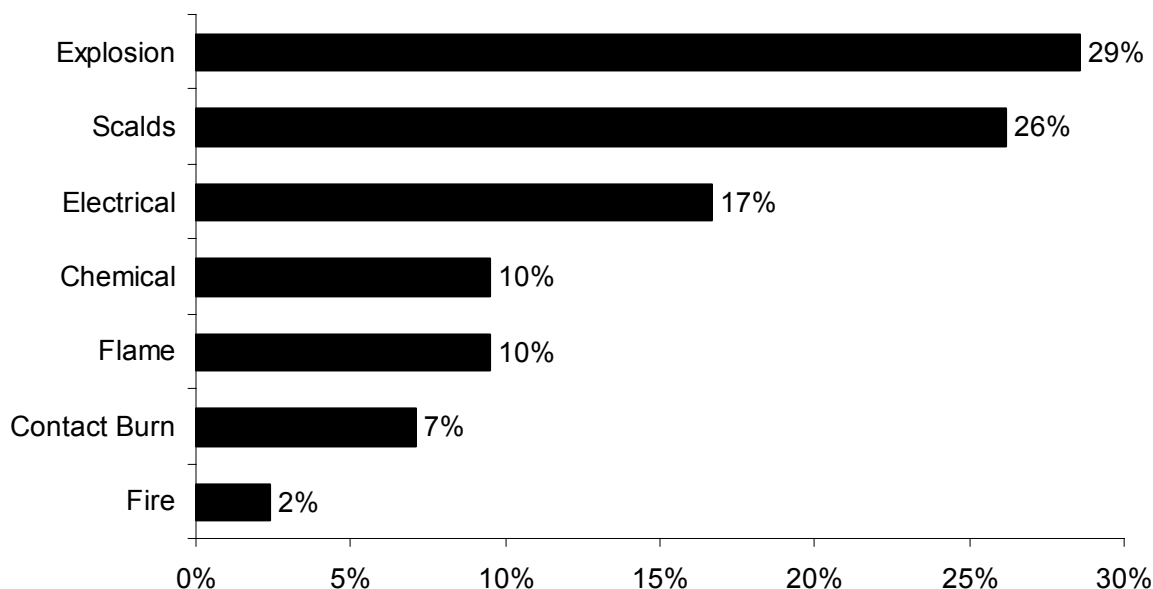
Four (4), or 10%, of work-related burn injuries in 2002 were chemical burns.

Flame burns accounted for four more, or another 10%, of these work-related burns. Two victims received their flame burn injuries from cutting torch accidents. One victim got his injury from a machine while the fourth victim received his from propane.

Three (3), or 7%, of the work-related burn injuries were from contact with hot objects. Touching flammables, a hot barbeque and a hot oven were each responsible for one of these injuries.

The only fire-related burn injury was a firefighter who was injured at a house fire.

Causes of Work-Related Burn Injuries



Landfill Worker Injured in Methane Gas Explosion

On February 1, 2002, a 29-year old male landfill worker was burned in an explosion. The victim was believed to have lit his pipe while on break. This caused an explosion of methane gas that had leaked through a pipe in a toilet that had a malfunctioning trap. He received burn injuries to over 20% of his body surface area.

Program to Reduce Scalds to Restaurant Kitchen Workers

In an effort to protect workers, often teenagers, who are burned working in restaurant kitchens, the Department of Fire Services and the Mass. Department of Public Health have collaborated with the Mass. Restaurant Association to develop a poster on first aid for burns in restaurants. The Massachusetts Restaurant Association will ask members to put these posters in their kitchens.

Burn Injury Reports by Hospital

Fifty-two (52) out of the 97 acute care health care facilities in Massachusetts submitted a total of 408 burn injury reports for 368 victims to the Massachusetts Burn Injury Reporting System (M-BIRS). Some individuals were treated at more than one hospital, resulting in more burn reports than total victims. For information on the number of burn reports submitted by each hospital, please refer to the table *Number of Reported Burn Injuries Per Hospital* in the Appendix.

Law Requires Hospitals to Report Burn Injuries Over 5% of the Body

Massachusetts General Law (MGL) Chapter 112, Section 12A requires all physicians and medical treatment facilities to immediately report treatment of every burn injury extending to 5% or more of a person's body surface area to the State Fire Marshal and to the police department in the community in which the burn occurred. Some hospitals, particularly Holy Family in Methuen report all burns, even the ones that do not meet the 5% threshold.

Hospitals May Fax Reports or Call and Submit Written Report

Health care facilities now have a choice about how to report burn injuries. If they choose to do so, health care providers may now fax their burn injury reports to the State Fire Marshal at the Department of Fire Services, (978) 567-3199. A completed transmission will satisfy both the telephone and written notification provisions of the law. Hospitals not opting for the fax report method must report burn injuries by telephone at (800) 475-3443 and submit a written report.

Although M-BIRS was instituted under the Department of Public Safety in June of 1984, Massachusetts hospitals have been required to report burn injuries to a government agency since 1973. M-BIRS, along with the Office of the State Fire Marshal, was carried over to the newly created Department of Fire Services in 1996. It remains a joint program of the Department of Fire Services and the Massachusetts Department of Public Health.

M-BIRS Has Two Main Purposes — Identifying Arsonists and Burn Prevention

Data collected by the Massachusetts Burn Injury Reporting System is used in several ways. Investigators use the data to determine if an arsonist was treated for a burn that resulted from an attempt to illegally burn a building or vehicle. If these burns are not reported promptly, arsonists may continue to light fires that threaten life and property. Our data has also been used to identify problems that need to be addressed by public education or regulation and to develop appropriate strategies to deal with these problems. We need to know what type of activity injures whom, if the injuries are seasonal, and how old the victims are, to develop and implement effective prevention programs. We appreciate the efforts of the many dedicated doctors, nurses and clerical personnel who report the burn injuries promptly and completely. They make the program work.

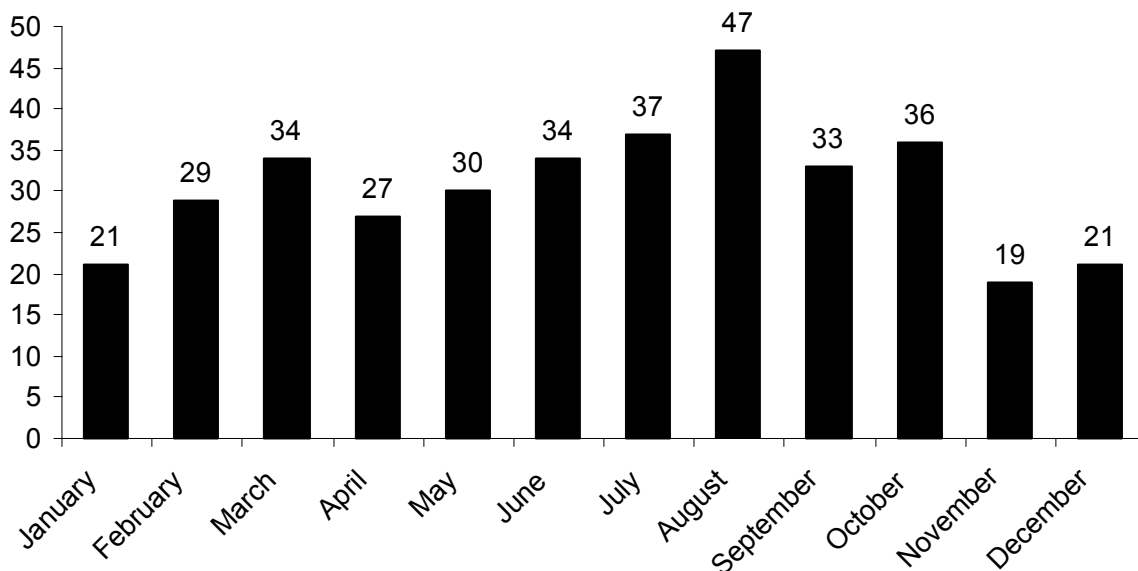
Burn Injuries by Month

Average of 30 Burns a Month

An average of 31 burns was reported during each month of 2002, from a low of 19 in November to a high of 47 in August. This average is up from 30 burns per month in 2001 but still down from 39 burns per month in 2000 and 38 burns per month in 1999.

Scalds caused the most burn injuries during every month of the year. In April and November, flame burns tied with scalds to cause the most injuries and in October fire-related burns tied scalds as the type of burn causing the most injuries. Spilled hot beverages, cooking liquids, hot tap water, cooking grease, steam and overheated car radiators cause scalds.

Reported Burn Injuries by Month

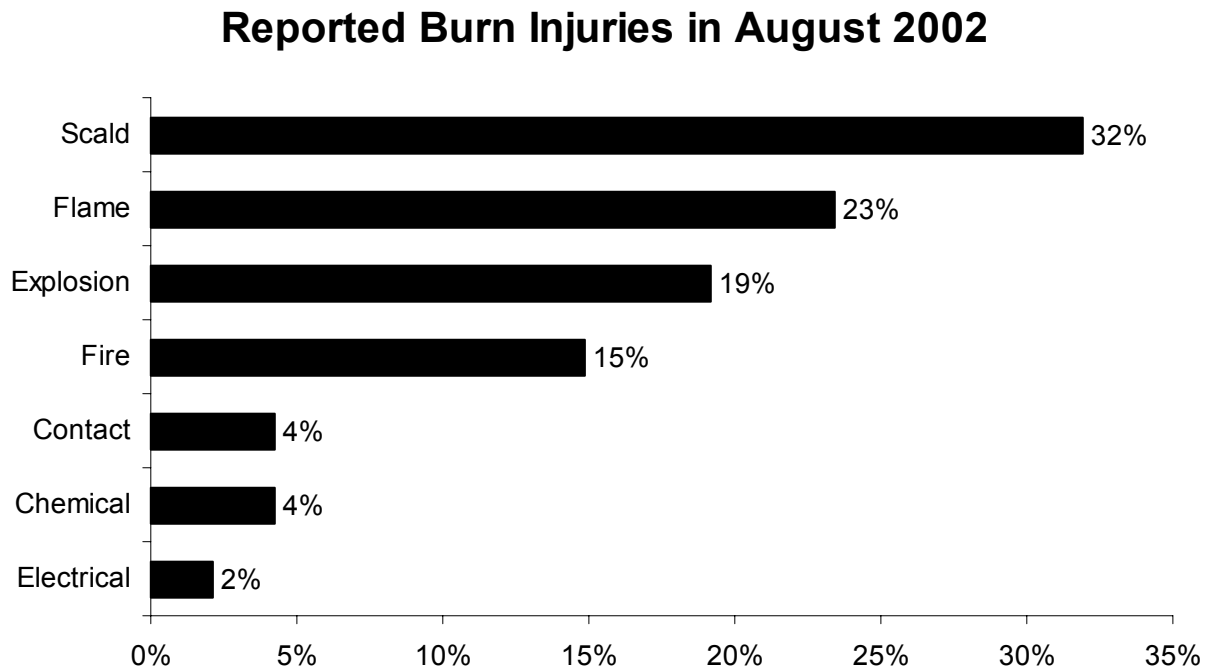


August Peak Month for Burns

August was the peak month for burns in 2002. Although there were no reported fireworks injuries, scalds were the leading cause of burn injuries in August. Scalds accounted for 22, or 32% of the burns in August, 2002. Burns from hot beverages and cooking liquids each caused four, or 9%, of the scald burn injuries whereas hot tap water burns accounted for three, or 6%, of the scald burn injuries. Except for two candle burns, one involving clothing, the other nine flame burn injuries were each incurred in a different manner. Flame burn injuries represented 23% of August's burn injuries. There were nine explosion burn injuries in August accounting for 19% of the total burn injuries. Explosives, gasoline and propane each caused two, or 4%, of the burn injuries in August. Five house fires, a bonfire and a motor vehicle fire accounted for seven, or 15% of these injuries. Contact with a barbeque and hot metal were each responsible for one, or

2%, of August's burns. There were also two chemical burns, resulting in 4% of these injuries. There was also one unspecified electrical burn representing 2% of the reported burn injuries in August, 2002 in Massachusetts.

The following chart indicates the leading causes of burn injuries reported in August, 2002.



For more information, please refer to the table *Causes of Burn Injuries by Month* in the Appendix.

Geographical Demographics

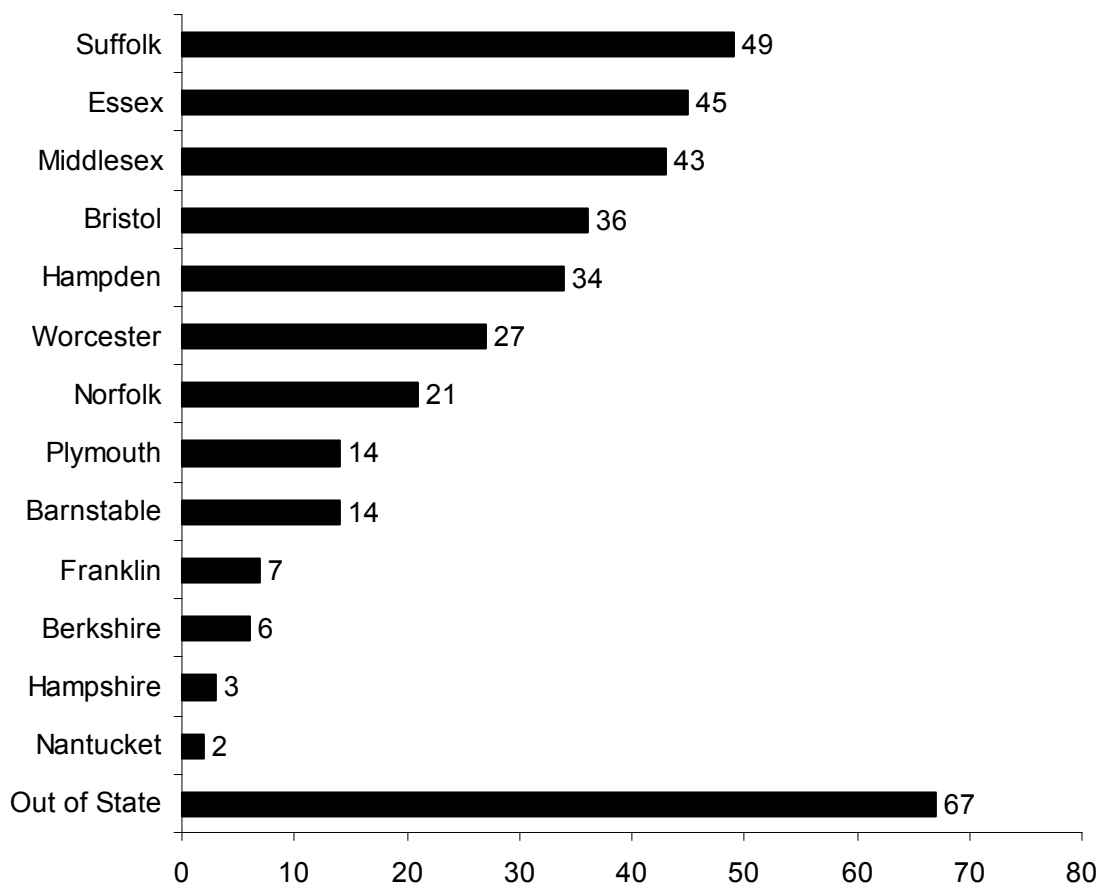
Massachusetts Burn Victims from 130 Cities and Towns

Massachusetts medical facilities treated 301 residents of 120 Massachusetts cities and towns. Burn victims came from every county in the Commonwealth. The largest numbers of reported burn injuries were incurred by residents of Essex, Middlesex and Suffolk counties. Two Essex County hospitals report all of their burns, including those that are less than 5% of the body surface area. This may explain why the numbers for Essex County are so high. It also appears that some large Boston hospitals (Suffolk County) may have under reported the burns they treated.

Sixty-seven (67) burn victims from out-of state-received treatment at Massachusetts facilities. Some of the people were injured while vacationing here; others came to Massachusetts specifically for the specialized treatment of burn injuries that is available in the Commonwealth.

For information on the number of burn victims from each Massachusetts community, please refer to the table *Burn Injuries by Victim's Community* in the Appendix.

Reported Burn Injuries by County



2002 Appendix

* Italicized names are sub-categories for the headings listed above them.

Specific Causes of Burn Injuries

Cause	# of Burns	% of Burns	Cause	# of Burns	% of Burns
Scalds	148	40.2%	Flame Burns (con't)		
Hot Beverages	60	16.3%	Portable Heater	2	0.5%
Cooking	38	10.3%	Cutting Torch	2	0.5%
<i>Cooking Liquids</i>	22	6.0%	Alcohol	1	0.3%
<i>Cooking Grease</i>	8	2.2%	Brushfire	1	0.3%
<i>Cooking (Unspec.)</i>	6	1.6%	Chemical	1	0.1%
<i>Food</i>	2	0.5%	Clothing Ignition	1	0.3%
Hot Tap Water	27	7.3%	Fireworks	1	0.3%
Car Radiator	14	3.8%	Flashburn	1	0.3%
Pipe	2	0.5%	Gas Stove	1	0.3%
Steam	2	0.5%	Heater	1	0.3%
Asphalt	1	0.3%	Huffing	1	0.3%
Assault	1	0.3%	Ignitable Liquids	1	0.3%
Domestic Violence	1	0.3%	Kerosene Heater	1	0.3%
Central Heater	1	0.3%	Lamp	1	0.3%
Other	1	0.3%	Machine	1	0.3%
			Tool	1	0.3%
Flame Burns	72	19.6%	Woodstove	1	0.3%
Cooking	14	3.8%	Unspecified	1	0.3%
<i>Cooking/Clothes Ignit.</i>	5	1.4%			
<i>Barbeque</i>	3	0.8%	Fires	68	18.5%
<i>Grease</i>	2	0.5%	House Fires	44	12.0%
<i>Stove</i>	2	0.5%	<i>House Fire</i>	32	8.7%
<i>Barbeque (Charcoal)</i>	1	0.3%	<i>Fire Control</i>	2	0.5%
<i>Barbeque (Gas)</i>	1	0.3%	<i>Appliance</i>	1	0.3%
Smoking	12	3.3%	<i>Child w/Gasoline</i>	1	0.3%
<i>Smoking on Oxygen</i>	3	0.8%	<i>Clothing</i>	1	0.3%
<i>Cigarette</i>	2	0.5%	<i>Lamp</i>	1	0.3%
<i>Smoking/Clothes Ignit.</i>	2	0.5%	<i>Microwave</i>	1	0.3%
<i>Smoking in Bed</i>	1	0.3%	<i>Self-Immolation.</i>	1	0.3%
<i>Smoking (Unspec.)</i>	1	0.3%	<i>Smoking in Bed</i>	1	0.3%
Gasoline	10	2.7%	<i>Smoking on Oxygen</i>	1	0.3%
<i>Gasoline (Unspec.)</i>	6	1.6%	<i>Smoking (Unspec.)</i>	1	0.3%
<i>Child w/Gasoline</i>	4	1.1%	<i>Stove</i>	1	0.3%
Self-Immolation	5	1.4%			
Candle	5	1.4%	Motor Vehicle Fires	8	2.2%
<i>Candle/Clothes Ignit.</i>	4	1.1%	<i>Gasoline</i>	2	0.5%
<i>Candle</i>	1	0.3%	<i>MVA</i>	2	0.5%
Aerosol Can	3	0.8%	<i>Car Fire</i>	1	0.3%
Children Playing	3	0.8%	<i>Car Part</i>	1	0.3%
<i>Child w/Matches</i>	2	0.5%	<i>Child w/Gasoline</i>	1	0.3%
<i>Child w/Lighter</i>	1	0.3%	<i>Self-Immolation</i>	1	0.3%
Propane	3	0.8%			

Cause	# of Burns	% of Burns
Fires (Con't)		
Brush Fires	7	1.9%
<i>Gasoline</i>	3	0.8%
<i>Brush/Clothes</i>	2	0.5%
<i>Brushfire</i>	2	0.5%
Camp or Bon Fires	3	0.8%
<i>Bon Fire</i>	3	0.8%
Structure Fire	2	0.5%
<i>Chemical</i>	1	0.3%
<i>MVA</i>	1	0.3%
Professional Firefighter	1	0.3%
Fires/Not Specified	3	0.8%
<i>Gasoline</i>	2	0.5%
<i>Child w/Gasoline</i>	1	0.3%
Explosions	30	8.2%
Propane	6	1.6%
Fireworks	4	1.1%
Gasoline	3	0.8%
Flammables	2	0.5%
Gas	2	0.5%
Cutting Torch	2	0.5%
Aerosol	1	0.3%
Boiler	1	0.3%
Chemical	1	0.3%
Cooking Liquids	1	0.3%
Explosives	1	0.3%
Flammable Materials	1	0.3%
Gas Stove	1	0.3%
Ignitable Liquids	1	0.3%
Cigarette Lighter	1	0.3%
Machine	1	0.3%
Self-Immolation	1	0.3%

Cause	# of Burns	% of Burns
Contact Burns	25	6.8%
Cooking	4	1.1%
<i>Barbeque (Unspec.)</i>	1	0.3%
<i>Food</i>	1	0.3%
<i>Barbeque (Charcoal)</i>	1	0.3%
<i>Stove</i>	1	0.3%
Clothes Iron	3	0.8%
Heater	2	0.5%
Machine	2	0.5%
Oven	2	0.5%
Wax	2	0.5%
Woodstove	2	0.5%
Assault	1	0.3%
Car Part	1	0.3%
Engine	1	0.3%
Fireplace	1	0.3%
Flammables	1	0.3%
Metal	1	0.3%
Unspecified	2	0.5%
Other Burn Injuries	13	3.5%
Chemical	9	2.4%
Assault	1	0.3%
Flashburn	1	0.3%
Self-Immolation	1	0.3%
Sunburn	1	0.3%
Electrical	12	3.3%
Electrocution	4	1.1%
Appliance	1	0.3%
Flashburn	1	0.3%
Unspecified	6	1.6%

Causes of Burn Injuries by Age

UNDER 5	92	25.0%
Cause	# of Burns	% By Age
Scalds	62	77.2%
Beverages	45	48.9%
Hot Tap Water	15	16.3%
Cooking	10	10.9%
<i>Cooking Liquids</i>	5	5.4%
<i>Cooking Grease</i>	3	3.3%
<i>Cooking (Unspec.)</i>	2	2.2%
Ruptured Pipe	1	1.1%
Contact	9	9.8%
Clothes Iron	3	3.3%
Fireplace	1	1.1%
Heater	1	1.1%
Metal	1	1.1%
Oven	1	1.1%
Stove	1	1.1%
Wax	1	1.1%
Flame	9	9.8%
Candle/Clothes	3	3.3%
Cooking	3	3.3%
<i>Barbeque(Charcoal)</i>	1	1.1%
<i>Barbeque (Unspec.)</i>	2	2.2%
Child w/Matches	1	1.1%
Fireworks	1	1.1%
Unspecified	1	1.1%
Fire	3	3.3%
House Fires	3	3.3%
<i>House Fire</i>	1	1.4%

AGES 5 TO 9	24	6.5%
Cause	# of Burns	% By Age
Scalds	16	66.7%
Beverages	7	29.2%
Hot Tap Water	4	16.7%
Cooking	5	5.4%
<i>Cooking Liquids</i>	2	8.3%
<i>Cooking (Unspec.)</i>	2	8.3%
<i>Food</i>	1	4.2%
Fires	4	16.7%
House Fires	3	12.5%
Bonfire	1	4.2%
Contact	2	8.3%
Car Part	1	4.2%
Woodstove	1	4.2%
Flame	2	8.3%
Child w/Gasoline	1	4.2%
Stove	1	4.2%

AGES 10 TO 14	33	9.0%
Cause	# of Burns	% By Age
Flame	17	51.5%
Gasoline	4	12.1%
<i>Child w/Gasoline</i>	3	9.1%
<i>Gasoline</i>	1	3.0%
Cooking	3	9.1%
<i>Barbecue (Unspec.)</i>	1	3.0%
<i>Cooking/Clothes Ig.</i>	1	3.0%
<i>Grease</i>	1	3.0%
Children Playing	2	6.1%
<i>Child w/Lighter</i>	1	3.0%
<i>Child w/Matches</i>	1	3.0%
Portable Heater	2	6.1%
Aerosol Can	1	3.0%
Brushfire	1	3.0%
Clothing	1	3.0%
Huffing	1	3.0%
Lamp	1	3.0%
Fire	7	21.2%
Vehicle Fires	3	9.1%
<i>Car Part</i>	1	3.0%
<i>Child w/Gasoline</i>	1	3.0%
<i>MVA</i>	1	4.8%
Brush Fires	1	3.0%
<i>Brush Fire</i>	1	3.0%
House Fire	1	3.0%
<i>House Fire</i>	1	3.0%
Fire (Unspecified)	2	6.1%
<i>Child w/Gasoline</i>	1	3.0%
<i>Gasoline</i>	1	3.0%
Scalds	4	12.1%
Beverages	2	6.1%
Cooking Liquids	1	6.1%
Explosion	3	9.1%
Fireworks	3	9.1%
Contact	1	3.0%
Machine	1	3.0%
Other	1	3.0%
Chemical	1	3.0%

AGES 15 TO 24	37	10.1%
Cause	# of Burns	% By Age
Scalds	13	35.1%
Cooking	6	16.2%
<i>Cooking Liquids</i>	4	10.8%
<i>Cooking (Unspec.)</i>	1	2.7%
<i>Food</i>	1	2.7%
Hot Tap Water	3	8.1%
Car Radiator	2	5.4%
Assault	1	2.7%
Beverages	1	2.7%
Fire	7	18.9%
House Fire	3	8.1%
<i>House Fire</i>	2	5.4%
<i>Child w/Gasoline</i>	1	2.7%
Camp or Bon Fire	2	5.4%
<i>Bonfire</i>	2	5.4%
Structure Fire	1	2.7%
<i>Chemical</i>	1	2.7%
Vehicle Fires	1	2.7%
<i>Gasoline</i>	1	2.7%
Contact	6	16.2%
Cooking	3	8.1%
<i>Barbeque (Charcoal)</i>	1	2.7%
<i>Food</i>	1	2.7%
<i>Oven</i>	1	2.7%
Assault	1	2.7%
Wax	1	2.7%
Unspecified	1	2.7%
Flame	5	13.5%
Gasoline	3	8.1%
Ignitable Liquids	1	2.7%
Machine	1	2.7%
Explosion	3	8.1%
Explosives	1	2.7%
Fireworks	1	2.7%
Gas Stove	1	2.7%
Other	3	8.1%
Chemical	1	2.7%
Flashburn	1	2.7%
Sunburn	1	2.7%

AGES 25 TO 34 50 13.6%**Cause # of Burns % By Age****Scalds 16 32.0%**

Car Radiator	4	8.0%
Cooking	4	8.0%
<i>Cooking Liquids</i>	2	4.0%
<i>Cooking Grease</i>	1	2.0%
<i>Cooking (Unspec.)</i>	1	2.0%
Hot Tap Water	3	6.0%
Beverages	2	4.0%
Domestic Violence	1	2.0%
Steam	1	2.0%
Unspecified	1	2.0%

Fire 12 24.0%

House Fires	9	18.0%
<i>House Fires</i>	7	14.0%
<i>Lamp</i>	1	2.0%
<i>Stove</i>	1	2.0%
Vehicle Fires	1	2.0%
<i>Gasoline</i>	1	2.0%
Professional Firefighter	1	2.2%
Fire (Unspecified)	1	2.0%
<i>Gasoline</i>	1	2.0%

Explosions 8 16.0%

Gasoline	2	4.0%
Aerosol Can	1	2.0%
Cooking Liquids	1	2.0%
Flammables	1	2.0%
Natural Gas	1	2.0%
Propane	1	2.0%
Self-Immolation	1	2.0%

Cause # of Burns % By Age**Flame 6 12.0%**

Propane	2	4.0%
Chemical	1	2.0%
Cutting Torch	1	2.0%
Self-Immolation	1	2.0%
Stove	1	2.0%

Electrical 4 8.0%

Appliance	1	2.0%
Electrocution	1	2.0%
Unspecified	2	4.0%

Other 3 6.0%

Chemical	2	4.0%
Self-Immolation	1	2.0%

Contact 1 2.0%

Woodstove	1	2.0%
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AGES 35 TO 44 48 13.0%**Cause # of Burns % By Age****Fire 15 31.3%**

House Fires 11 22.9%

House Fire 6 12.5%*Smoking* 2 4.2%*Appliance* 1 2.1%*Fire Control* 1 2.1%*Microwave* 1 2.1%

Brush Fires 3 6.3%

Gasoline 2 4.2%*Brush/Clothes* 1 2.1%

Vehicle Fires 1 2.1%

MVA 1 2.1%**Flame 11 22.9%**

Self-Immolation 3 6.3%

Aerosol Can 1 2.1%

Barbeque (Gas) 1 2.1%

Candle 1 2.1%

Flashburn 1 2.1%

Gas Stove 1 2.1%

Gasoline 1 2.1%

Kerosene Heater 1 2.1%

Propane 1 2.1%

Scalds 8 16.7%

Cooking 5 10.4%

Cooking Liquids 4 8.3%*Cooking Grease* 1 2.1%

Beverages 1 2.1%

Car Radiator 1 2.1%

Pipe 1 2.1%

Cause # of Burns % By Age**Explosions 5 10.4%**

Boiler 3 2.1%

Flammable Materials 2 2.1%

Flammables 1 2.1%

Ignitable Liquids 1 2.1%

Propane 1 2.1%

Other 4 8.3%

Chemical 3 6.3%

Assault 1 2.1%

Electrical 3 6.3%

Electrocution 3 6.3%

Contact 2 4.2%

Engine 1 2.1%

Unspecified 1 2.1%

AGES 45 TO 54	37	10.1%
Cause	# of Burns	% By Age
Scalds	9	24.3%
Car Radiator	4	10.8%
Cooking Liquids	3	8.1%
Asphalt	1	2.7%
Steam	1	2.7%
Flame	8	21.6%
Aerosol Can	1	2.7%
Smoking	2	5.4%
<i>Cigarette</i>	<i>1</i>	<i>2.7%</i>
<i>Smoking</i>	<i>1</i>	<i>2.7%</i>
Candle/Clothes	1	2.7%
Cooking/Clothes Ignit.	1	2.7%
Heater	1	2.7%
Self-Immolation	1	2.7%
Woodstove	1	2.7%
Fire	7	18.9%
House Fires	4	10.8%
<i>House Fire</i>	<i>4</i>	<i>10.8%</i>
Brush Fires	1	2.7%
<i>Gasoline</i>	<i>1</i>	<i>2.7%</i>
Vehicle Fires	1	2.7%
<i>MVA</i>	<i>1</i>	<i>2.7%</i>
Structure Fires	1	2.7%
<i>Self-Immolation</i>	<i>1</i>	<i>2.7%</i>
Electrical	5	13.5%
Flashburn	1	2.7%
Unspecified	4	10.8%
Explosions	4	10.8%
Cutting Torch	2	5.4%
Gasoline	1	2.7%
Natural Gas	1	2.7%
Contact	2	5.4%
Flammables	1	2.7%
Machine	1	2.7%
Other	2	5.4%
Chemical	2	5.4%

AGES 55 TO 64	21	5.7%
Cause	# of Burns	% By Age
Scalds	8	38.1%
Cooking Grease	3	14.3%
Hot Beverages	2	9.5%
Car Radiator	1	4.8%
Central Heater	1	4.8%
Hot Tap Water	1	4.8%
Fires	5	23.8%
House Fires	3	14.3%
<i>House Fire</i>	<i>1</i>	<i>4.8%</i>
<i>Self-Immolation</i>	<i>1</i>	<i>4.8%</i>
<i>Smoking in Bed</i>	<i>1</i>	<i>4.8%</i>
Brush Fires	1	4.8%
<i>Brush Fire</i>	<i>1</i>	<i>4.8%</i>
Vehicle Fires	1	4.8%
<i>Car Fire</i>	<i>1</i>	<i>4.8%</i>
Flame	4	19.0%
Smoking	3	14.3%
<i>Smoking on Oxygen</i>	<i>2</i>	<i>9.5%</i>
<i>Smoking in Bed</i>	<i>1</i>	<i>4.8%</i>
Cutting Torch	1	4.8%
Explosion	3	14.3%
Propane	2	9.5%
Chemical	1	4.8%
Contact	1	4.8%
Barbeque (Unspec.)	1	4.8%

AGES 65 TO 74	15	4.1%
Cause	# of Burns	% By Age
Fire	5	33.3%
House Fires	4	26.7%
<i>House Fire</i>	2	13.3%
<i>Clothing</i>	1	6.7%
<i>Fire Control</i>	1	6.7%
Brush Fires	1	6.7%
<i>Brush/Clothes</i>	1	6.7%
Flame	4	26.7%
Smoking	2	13.3%
<i>Smoking on Oxygen</i>	1	6.7%
<i>Smoking/Clothes Ign.</i>	1	6.7%
Cooking/Clothes Ign.	1	6.7%
Gasoline	1	6.7%
Explosion	3	20.0%
Cigarette Lighter	1	6.7%
Machine	1	6.7%
Propane	1	6.7%
Scalds	2	13.3%
Car Radiator	1	6.7%
Hot Tap Water	1	6.7%
Contact	1	6.7%
Heater	1	6.7%

AGES 75 TO 84	7	1.9%
Cause	# of Burns	% By Age
Flame	3	42.9%
Cooking	2	28.6%
<i>Cooking/Clothes Ign.</i>	1	14.3%
<i>Grease</i>	1	14.3%
Smoking/Clothes Ign.	1	14.3%
Fire	2	28.6%
House Fires	2	28.6%
<i>House Fire</i>	1	14.3%
<i>Smoking on Oxygen</i>	1	14.3%
Contact	1	14.3%
Propane	1	14.3%
Scalds	1	14.3%
Car Radiator	1	14.3%
AGES 85+	3	0.8%
Cause	# of Burns	% By Age
Flame	2	66.7%
Cooking/Clothes Ign.	1	33.3%
Tool	1	33.3%
Fire	1	33.3%
House Fires	1	33.3%
<i>House Fire</i>	1	33.3%

Causes of Burn Injuries by Month

JANUARY	21	5.7%
Cause	# of Burns	% By Month
Scalds	8	38.1%
Beverages	4	19.0%
Cooking Liquids	3	14.3%
Hot Tap Water	1	4.8%
Fire	5	23.8%
House Fires	5	23.8%
<i>House Fire</i>	5	23.8%
Flame	4	19.0%
Cooking	2	9.5%
<i>Cooking/Clothes Ign.</i>	1	4.8%
<i>Stove</i>	1	4.8%
Candle/Clothes	1	4.8%
Smoking/Clothes Ign.	1	4.8%
Electrical	2	9.5%
Appliance	1	4.8%
Flashburn	1	4.8%
Contact	1	4.8%
Unspecified	1	4.8%
Explosion	1	4.8%
Propane	1	4.8%

FEBRUARY	29	7.9%
Cause	# of Burns	% By Month
Scalds	12	41.4%
Beverages	7	24.1%
Hot Tap Water	2	6.9%
Car Radiator	1	3.4%
Cooking Liquids	1	3.4%
Central Heater	1	3.4%
Flame	8	27.6%
Cooking	2	6.9%
<i>Barbeque (Unspec.)</i>	1	13.4%
<i>Cooking/Clothes Ign.</i>	1	3.4%
Brush Fire	1	3.4%
Child w/Gasoline	1	3.4%
Gas Stove	1	3.4%
Heater	1	3.4%
Smoking in Bed	1	3.4%
Cutting Torch	1	3.4%
Fire	4	13.8%
House Fires	2	6.9%
<i>House Fire</i>	2	6.9%
Bon Fires	1	3.4%
<i>Bon Fire</i>	1	3.4%
Vehicle Fires	1	3.7%
<i>MVA</i>	1	3.7%
Contact	3	10.3%
Heater	2	6.9%
Fireplace	1	3.7%
Explosion	1	3.7%
Natural Gas	1	3.7%
Other	1	3.7%
Chemical	1	3.7%

MARCH	34	9.2%
Cause	# of Burns	% By Month
Scalds	12	35.3%
Beverages	9	26.5%
Cooking Liquids	1	2.9%
Burst Pipe	1	2.9%
Hot Tap Water	1	2.9%
Flame	12	35.3%
Gasoline	4	11.8%
<i>Gasoline</i>	3	8.8%
<i>Child w/Gasoline</i>	1	2.9%
Portable Heater	2	5.9%
Smoking	2	5.9%
<i>Cigarette</i>	1	2.9%
<i>Smoking (Unspec.)</i>	1	2.9%
Grease	1	2.9%
Lamp	1	2.9%
Woodstove	1	2.9%
Unspecified	1	2.9%
Fire	8	23.5%
House Fires	7	20.6%
<i>House Fire</i>	6	17.69%
<i>Child w/Gasoline</i>	1	2.9%
Vehicle Fires	1	2.9%
<i>Car Part</i>	1	2.9%
Contact	2	5.9%
Barbeque (Charcoal)	1	2.9%
Wax	1	2.9%

APRIL	27	7.3%
Cause	# of Burns	% By Month
Scalds	11	40.7%
Beverages	5	18.5%
Car Radiator	2	7.4%
Cooking	2	7.4%
<i>Cooking (Unspec.)</i>	1	3.7%
<i>Cooking Liquids</i>	1	3.7%
Hot Tap Water	2	7.4%
Fire	9	33.3%
Brush Fires	6	22.2%
<i>Brush/Clothes</i>	2	7.4%
<i>Brush Fire</i>	2	7.4%
<i>Gasoline</i>	2	7.4%
House Fires	3	11.1%
<i>House Fire</i>	2	7.4%
<i>Smoking in Bed</i>	1	3.7%
Contact	3	11.1%
Car Part	1	3.7%
Woodstove	1	3.7%
Unspecified	1	3.7%
Flame	3	11.1%
Aerosol Can	1	3.7%
Self-immolation	1	3.7%
Tool	1	3.7%
Other	1	3.7%
Chemical	1	3.7%

MAY	30	8.2%
Cause	# of Burns	% By Month
Scalds	12	40.0%
Beverages	6	20.0%
Cooking	3	10.0%
<i>Cooking Liquids</i>	2	6.7%
<i>Cooking Grease</i>	1	3.3%
Hot Tap Water	2	6.7%
Unspecified	1	3.3%
Fire	7	23.3%
House Fires	5	16.7%
<i>House Fire</i>	1	16.7%
Vehicle Fires	1	3.3%
<i>Gasoline</i>	1	3.3%
Brush Fires	1	3.3%
<i>Gasoline</i>	1	3.3%
Flame	4	13.3%
Candle/Clothes Ign.	1	3.3%
Child w/Gasoline	1	3.3%
Flashburn	1	3.3%
Self-Immolation	1	3.3%
Explosion	3	10.0%
Flammable Material	1	3.3%
Ignitable Liquids	1	3.3%
Cutting Torch	1	3.3%
Contact	2	6.7%
Food	1	3.3%
Propane	1	3.3%
Other	2	6.7%
Chemical	1	3.3%
Self-Immolation	1	3.3%

JUNE	34	9.2%
Cause	# of Burns	% By Month
Scalds	17	50.0%
Hot Tap Water	8	23.5%
Beverages	4	11.8%
Cooking	3	8.8%
<i>Cooking Liquids</i>	2	5.9%
<i>Cooking (Unspec.)</i>	1	2.9%
Car Radiator	2	5.9%
Flame	6	17.6%
Children Playing	3	8.8%
<i>Child w/Matches</i>	2	5.9%
<i>Child w/Lighter</i>	1	2.9%
Child w/Gasoline	1	2.9%
Propane	1	2.9%
Stove	1	2.9%
Electrical	3	8.8%
Electrocution	1	2.9%
Unspecified	2	5.9%
Explosion	3	8.8%
Chemical	1	2.9%
Fireworks	1	2.9%
Natural Gas	1	2.9%
Contact	2	5.9%
Clothes Iron	1	2.9%
Machine	1	2.9%
Fire	2	5.9%
House Fires	2	5.9%
<i>Fire Control</i>	1	2.9%
<i>Self-Immolation</i>	1	2.9%
Other	1	2.9%
Sunburn	1	2.9%

JULY	37	10.1%
Cause	# of Burns	% By Month
Scalds	18	48.6%
Cooking	9	24.3%
<i>Cooking Grease</i>	3	8.1%
<i>Cooking (Unspec.)</i>	3	8.1%
<i>Cooking Liquids</i>	2	5.4%
<i>Food</i>	1	2.7%
Beverages	3	8.1%
Car Radiator	3	8.1%
Hot Tap Water	3	8.1%
Flame	7	18.9%
Cooking	2	5.4%
<i>Barbeque (Charcoal)</i>	1	2.7%
<i>Barbeque (Unspec.)</i>	1	2.7%
Gasoline	2	5.4%
Fireworks	1	2.7%
Machine	1	2.7%
Smoking on Oxygen	1	2.7%
Explosion	4	10.8%
Fireworks	1	2.7%
Flammables	1	2.7%
Propane	1	2.7%
Self-Immolation	1	2.7%
Contact	2	5.4%
Clothes Iron	1	2.7%
Oven	1	2.7%
Fire	3	8.1%
House Fires	2	5.4%
<i>Appliance</i>	1	2.7%
<i>Fire Control</i>	1	2.7%
Vehicle Fires	1	2.7%
<i>Self-Immolation</i>	1	2.7%
Other	2	5.4%
Assault	1	2.7%
Chemical	1	2.7%

AUGUST	47	12.8%
Cause	# of Burns	% By Month
Scalds	15	31.9%
Cooking	5	10.6%
<i>Cooking Liquids</i>	4	8.5%
<i>Cooking Grease</i>	1	2.1%
Beverages	4	8.5%
Hot Tap Water	3	6.4%
Car Radiator	2	4.3%
Asphalt	1	2.1%
Flame	11	23.4%
Aerosol Can	1	2.1%
Alcohol	1	2.1%
Candle	1	2.1%
Candle/Clothes Ign.	1	2.1%
Gasoline	1	2.1%
Huffing	1	2.1%
Ignitable Liquids	1	2.1%
Propane	1	2.1%
Self-Immolation	1	2.1%
Smoking on Oxygen	1	2.1%
Explosion	9	19.1%
Explosive	2	4.3%
Gasoline	2	4.3%
Propane	2	4.3%
Aerosol Can	1	2.1%
Cooking Liquids	1	2.1%
Cutting Torch	1	2.1%
Fire	7	14.9%
House Fires	5	10.6%
<i>House Fire</i>	4	8.5%
<i>Smoking on Oxygen</i>	1	2.1%
Camp or Bonfires	1	2.1%
<i>Bonfire</i>	1	2.1%
Vehicle Fires	1	2.1%
<i>Child w/Gasoline</i>	1	2.1%
Contact	2	4.3%
Barbeque (Unspec.)	1	2.1%
Metal	1	2.1%
Other	2	4.3%
Chemical	2	4.3%
Electrical	1	2.1%
Unspecified	1	2.1%

SEPTEMBER	33	9.0%
Cause	# of Burns	% By Month
Scalds	14	42.4%
Beverage	7	21.2%
Car Radiator	3	9.1%
Assault	1	3.0%
Cooking Liquids	1	3.0%
Hot Tap Water	1	3.0%
Steam	1	3.0%
Explosion	5	15.2%
Flammables	1	3.0%
Gas Stove	1	3.0%
Gasoline	1	3.0%
Lighter	1	3.0%
Machine	1	3.0%
Flame	5	15.2%
Cooking	3	9.1%
<i>Barbeque (Unspec.)</i>	<i>1</i>	<i>3.0%</i>
<i>Barbeque (Charcoal)</i>	<i>1</i>	<i>3.0%</i>
<i>Cooking/Clothes Ign.</i>	<i>1</i>	<i>3.0%</i>
Cigarette	1	3.0%
Self-Immolation	1	3.0%
Fire	4	12.1%
Camp or Bon Fire	1	3.0%
<i>Bonfire</i>	<i>1</i>	<i>3.0%</i>
House Fire	1	3.0%
<i>Smoking</i>	<i>1</i>	<i>3.0%</i>
Structure Fire	1	3.0%
<i>Chemical</i>	<i>1</i>	<i>3.0%</i>
Fire (Unspecified)	1	3.0%
<i>Child w/Gasoline</i>	<i>1</i>	<i>3.0%</i>
Electrical	2	6.1%
Electrocution	2	6.1%
Contact	2	6.1%
Flammables	1	3.0%
Machine	1	3.0%
Other	1	3.0%
Chemical	1	3.0%

OCTOBER	36	9.8%
Cause	# of Burns	% By Month
Fire	13	36.1%
House Fires	9	25.0%
<i>House Fire</i>	<i>7</i>	<i>19.4%</i>
<i>Clothing</i>	<i>1</i>	<i>2.8%</i>
<i>Lamp</i>	<i>1</i>	<i>2.8%</i>
Vehicle Fires	3	8.3%
<i>Car Fire</i>	<i>1</i>	<i>2.8%</i>
<i>Gasoline</i>	<i>1</i>	<i>2.8%</i>
<i>MVA</i>	<i>1</i>	<i>2.8%</i>
Fire (Unspecified)	1	2.8%
<i>Gasoline</i>	<i>1</i>	<i>2.8%</i>
Scalds	13	36.1%
Cooking	6	16.7%
<i>Cooking Liquids</i>	<i>3</i>	<i>8.3%</i>
<i>Cooking Grease</i>	<i>3</i>	<i>8.3%</i>
Beverages	3	8.3%
Hot Tap Water	2	5.6%
Car Radiator	1	2.8%
Steam	1	2.8%
Flame	4	11.1%
Cooking/Clothes Ign.	1	2.8%
Propane	1	2.8%
Self-Immolation	1	2.8%
Smoking on Oxygen	1	2.8%
Electrical	3	8.3%
Electrocution	1	2.8%
Unspecified	2	5.6%
Explosion	1	2.8%
Propane	1	2.8%
Other	2	5.6%
Chemical	2	5.6%

NOVEMBER	19	5.2%
Cause	# of Burns	% By Month
Flame	6	31.6%
Candle/Clothes Ign.	1	5.3%
Clothing	1	5.3%
Grease	1	5.3%
Kerosene Heater	1	5.3%
Smoking/Clothes Ign.	1	5.3%
Cutting Torch	1	5.3%
Scalds	6	31.6%
Beverages	3	15.8%
Cooking Liquids	1	5.3%
Domestic Violence	1	5.3%
Pipe	1	5.3%
Contact	1	10.5%
Clothes Iron	1	5.8%
Stove	1	5.8%
Explosion	2	10.5%
Fireworks	2	10.5%
Fire	2	10.5%
House Fires	1	5.8%
House Fire	1	5.8%
Fire (Unspecified)	1	5.8%
Gasoline	1	5.8%
Other	1	5.8%
Flashburn	1	5.8%

DECEMBER	21	5.7%
Cause	# of Burns	% By Month
Scalds	9	42.9%
Beverages	5	23.8%
Cooking	3	14.3%
Cooking (Unspec.)	1	4.8%
Cooking Liquids	1	4.8%
Food	1	4.8%
Hot Tap Water	1	4.8%
Contact	5	23.8%
Assault	1	4.8%
Engine	1	4.8%
Oven	1	4.8%
Wax	1	4.8%
Woodstove	1	4.8%
Fire	4	18.2%
House Fires	2	9.1%
Microwave	1	4.8%
Stove	1	4.8%
Professional Firefighter	1	4.8%
Structure Fires	1	4.8%
MVA	1	4.8%
Flame	2	9.1%
Aerosol Can	1	4.8%
Cooking/Clothes Ign.	1	4.8%
Explosion	1	9.1%
Boiler	1	4.8%

Number of Reported Burns Per Hospital

Addison Gilbert Hospital	1	Massachusetts General Hospital	84
Anna Jaques Hospital	2	Mary Lane Hospital	2
Athol Memorial Hospital	3	Merrimack Valley Hospital	1
Baystate Medical Center	34	Metro West Hospital	4
Berkshire Medical Center	2	Milford-Whitinsville Hospital	3
Beth Israel Deacon. Hosp., Needham	1	Milton Hospital	2
Boston Medical Center	4	Morton Hospital	4
Burbank Hospital	4	Mount Auburn Hospital	3
Brigham & Women's Hospital	50	Nantucket Cottage Hospital	2
Cape Cod Hospital	8	Nashoba Hospital	1
Charlton Memorial Hospital	3	New England Medical Center	1
Clinton Hospital	1	North Adams Regional Hospital	1
Emerson Hospital	1	North Shore Children's Hospital	1
Fairview Hospital	2	North Shore Medical Center	2
Falmouth Hospital	2	Norwood Hospital	3
Faulkner Hospital	2	Salem Hospital	1
Franklin Medical Center	6	St. Elizabeth's Hospital	1
Health Alliance Hospital, Burbank	4	St. Luke's Hospital	15
Health Alliance Hospital, Leominster	3	St. Vincent's Hospital	1
Henry Heywood Hospital	7	Shriners Burns Hospital	102
Harrington Memorial Hospital	3	South Shore Hospital	2
Holy Family Hospital	18	Sturdy Memorial Medical Center	3
Jordan Hospital	1	UMass Medical Center, Memorial	1
Lawrence General Hospital	1	UMass Medical Center, University	1
Lawrence Memorial Hosp., Medford	1	Union Hospital	1
Lowell General Hospital	2	Winchester Hospital	1

Burn Injuries by Victim's Community

County # of Burns

Barnstable 14

Barnstable	3
Bourne	1
Dennis	2
Eastham	2
Falmouth	2
Harwich	1
Hyannis	2
Yarmouth	1

Berkshire 6

Great Barrington	1
North Adams	1
Pittsfield	3
Richmond	1

Bristol 36

Attleboro	1
Dartmouth	5
Dighton	1
Fairhaven	3
Fall River	1
Freetown	1
Mansfield	1
New Bedford	12
North Attleboro	2
Norton	1
Taunton	6
Westport	2

Essex 45

Beverly	2
Haverhill	5
Lawrence	9
Lynn	9
Lynnfield	1
Merrimac	1
Methuen	8
North Andover	1
Peabody	4
Salem	1
Saugus	1
Topsfield	1
West Newbury	2

County # of Burns

Franklin 7

Greenfield	3
Northfield	1
Orange	2
Warwick	1

Hampden 34

Agawam	1
Brimfield	1
Chicopee	2
East Longmeadow	1
Holland	1
Holyoke	2
Longmeadow	1
Ludlow	1
Palmer	2
Springfield	23
West Springfield	1

Hampshire 3

Amherst	1
Chesterfield	1
Ware	1

Middlesex 43

Acton	1
Ashland	1
Bedford	1
Belmont	3
Billerica	1
Cambridge	2
Dracut	2
Everett	2
Framingham	5
Holliston	1
Lincoln	1
Lowell	4
Malden	3
Medford	2
Natick	1
North Reading	1
Pepperell	1
Somerville	3
Sudbury	1

County	# of Burns
Middlesex (con't)	
Waltham	1
Watertown	1
Wayland	1
Wilmington	2
Winchester	3
Woburn	3
Nantucket	2
Nantucket	2
Norfolk	21
Braintree	1
Brookline	1
Needham	1
Norfolk	1
Norwood	2
Plainville	1
Quincy	5
Randolph	1
Sharon	1
Walpole	3
Weymouth	5
Wrentham	1

County	# of Burns
Plymouth	14
Brockton	4
Carver	1
Hanson	1
Marshfield	1
Onset	1
Plymouth	1
Rockland	1
Wareham	1
West Bridgewater	1
Suffolk	48
Boston	41
Chelsea	2
Revere	4
Winthrop	1
Worcester	27
Ashburnham	1
Athol	2
Barre	2
Clinton	1
Dudley	1
Fitchburg	5
Gardner	5
Hardwick	1
Lunenburg	1
Millville	1
Northbridge	1
Petersham	1
Southborough	1
Warren	1
Webster	1
Winchendon	1
Worcester	1

Causes of Work-Related Burns

Cause	# of Burns	% of Total
Explosion	12	29%
Gasoline	2	5%
Natural Gas	2	5%
Propane	2	5%
Cutting Torch	2	5%
Boiler	1	2%
Flammable Material	1	2%
Flammables	1	2%
Ignitable Liquids	1	2%
Scalds	11	26%
Beverages	3	7%
Cooking Liquids	3	7%
Car Radiator	1	2%
Central Heater	1	2%
Pipe	1	2%
Steam	1	2%
Hot Tap Water	1	2%
Electrical	7	17%
Electrocution	3	7%
Unspecified	4	10%

Cause	# of Burns	% of Total
Other	4	10%
Chemical	4	10%
Flame	4	10%
Cutting Torch	2	5%
Machine	1	2%
Propane	1	2%
Contact	3	7%
Cooking	2	5%
Barbeque (Charcoal)	1	2%
Oven	1	2%
Flammables	1	2%
Fire	1	2%
Prof. Firefighter	1	2%